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SPRINGS, STREAMS, AND SPAS OF LONDON

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CORNHILL PUMP (1800).

After a print in the Guildhall Art Collections.

Frontispiece.

SPRINGS, STREAMS AND SPAS OF LONDON

HISTORY AND ASSOCIATIONS

By ALFRED STANLEY FOORD

WITH TWENTY-SEVEN
ILLUSTRATIONS

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INTRODUCTION

THE history of the various sources and means whereby the City of London, and the suburbs which later grew up around it, derived their water-supply, may be found scattered through the pages of innumerable books, pamphlets, and magazines, as well as in the columns of newspapers, ranging from the seventeenth century to the present time, in which a variety of information has been published, bearing more or less directly upon the subject. London's water-supply is a theme that has been treated by different writers from very diverse points of views—traditional, historical, anecdotal, and statistical—but in no single volume, so far as the writer can learn, has any attempt hitherto been made to collect the stray fragments, and to piece them together so as to form something like a consecutive story. The chief aim of the present compilation has therefore been in the direction of carrying out this idea of continuity of narration, by sketching the gradual progress effected in the means of water-supply, from the crude methods of the earlier denizens of London, when they depended for their requirements upon streams and shallow wells, down to the more matured system of a house-to-house service.

Introduction

A great many volumes upon London have been consulted—from FitzStephen and Stow, to Maitland and Besant. Maps and plans have also proved invaluable in their record of the successive stages in the annals of the Great City's water-supply: these have been examined and compared with later and contemporary plans, including the publications of the Ordnance Survey. The Crace collection[1] of maps and views of London is a veritable mine of information to the student of the capital: the maps, some of which are rare and unique, form a continuous series from 1560 to 1859; many of the drawings have an artistic as well as an antiquarian interest, and often incidentally illustrate bygone manners and customs. No one writing about London can dispense with so rich a depository.

The very nature of the subject dealt with in the following pages has necessitated frequent quotations from the works of the earlier writers, many of whom lived in the times they treat of; the people, places, and scenes which they depict thus coming under their own observation. In this respect they enjoyed an immeasurable advantage over those who, after a lapse of years and with impressions faded, have attempted, as it were, to repeople a world, and to reconstruct scenes that have long passed out of existence. But the present-day writer may be said to possess this advantage over his predecessors; that within his reach are ancient records, which have been translated

[1] The whole collection, which was purchased in 1880 by the Trustees of the British Museum from Mr. J. G. Crace, consists of between 5,000 and 6,000 prints and drawings, besides three volumes of maps, &c.

by scholars in recent years from the mediæval Latin and Norman-French of the originals. For this most useful work, all inquirers into the social and municipal history of ancient London are under special obligation to the late Mr. H. T. Riley, who edited the "Mediæval Chronicles and Memorials" series of the Master of the Rolls, with the title of "Munimenta Gildhallæ Londoniensis." These include the "Liber Horn,"[1] compiled about 1311–1314; the "Liber Custumarum," compiled about the year 1320; both works containing valuable compilations of City laws and customs; and the "Liber Albus," compiled in 1419 by John Carpenter, Common Clerk in the mayoralty of Richard Whittington. As regards the varied contents of the "Liber Albus," Mr. Riley himself writes at considerable length in his Introduction. "There is," he says, "hardly a phase or feature of London life, from the time of the Conqueror to the reign of Henry V., upon which, in a greater or less degree, from the pages of the 'Liber Albus,' some light is not reflected." Another prolific source of information is an Analytical Index to Civic Records known as the "Remembrancia," consisting of nine manuscript volumes of correspondence, covering the period from 1579 to 1664. This Index was published in 1878, with valuable notes, by the Guildhall Library Committee. There are also Riley's "Memorials of London, and London Life," from *circa* 1275 to 1419, founded on the Letter Books A to I of the Corporation for that period. This series of volumes is so called from their being severally distinguished by a letter of the alphabet from

[1] Named from Andrew Horn, Chamberlain of London, an office he probably held for about eight years: died 1328.

A to Z, and from AA to ZZ, comprising just fifty volumes, and in point of time extending from the early years of the reign of Edward I. almost to the close of the reign of James II. The earlier volumes possess the greater interest, inasmuch as they contain the chief, if not the only existing record of the proceedings of the Court of Common Council and Court of Aldermen prior to the fifteenth century, commencing about 140 years before the Journals of the Common Council which date from 1416. These Letter Books have been edited by Dr. Reginald R. Sharpe (1899).

The contents of these records were early appreciated and partially extracted from. Fabyan,[1] Stow, Strype, Seymour, and indeed almost every City historian, have had recourse to them. Of the use made of them by Stow we have only to turn to the recent scholarly version of the "Survey of London" (1908), in which the editor, Mr. Lethbridge Kingsford, draws attention to passages in that famous classic which had been extracted from the archives at the Guildhall. It is certain, says Mr. Kingsford, that Stow used the "Liber Albus" and "Liber Custumarum," but it is not so clear that he was acquainted with the "Liber de Antiquis Legibus."[2] The next writer, probably, who was indebted for any of his

[1] Alderman Robert Fabyan, Sheriff in 1493, was buried in St. Michael's, Cornhill, in 1513. He compiled an elaborate Chronicle dealing with France as well as England, which he called "The Concordance of Histories," and which Stow characterises as "a painful labour to the honour of the City and the whole realm."

[2] "Liber de Antiquis Legibus"—temp. Edward I., published in 1846 from the City Records as an addition to the Chroniques de Londres in 1844.

matter to the Letter Books and other compilations at the Guildhall, was the indefatigable Rymer (1641–1713). His "Fœdera" is a collection of leagues, treaties, alliances, &c., between the Crown of England and other Kingdoms, and is of high value and authority for almost all periods of the Middle Ages and for the sixteenth century. The first volume was published in 1704. It opens with a Convention between Henry I. and Robert, Earl of Flanders, dated May 17, 1101. The latest document was dated 1654. Strype, the historian and ecclesiologist, in preparing his elaborate edition of Stow's "Survey" (1720) was evidently at considerable pains to consult the City archives, with the view of improving upon Stow's rather scanty information as to the early history of its institutions.

It may seem superfluous to add that in a subject which engaged the attention of so many competent writers, there can be little left that is really new or original to say about it. A few facts, however, which appear to have hitherto escaped notice, have been introduced into these pages, more especially in connection with some of the later-discovered medicinal springs.

To guard against the repetition of errors which are known to occur in the writings of some of the older historians (and unfortunately copied by later ones), either through inadvertence, or more frequently perhaps from the want of facilities for obtaining authentic information—statements of fact, as well as dates (where there was reason to suspect inaccuracy) have been carefully verified, and, where possible, from the original sources. But in saying

this, the author does not suggest that he may not himself have fallen into some errors, which, in a subject covering so large an extent of ground, will, in spite of every effort to ensure accuracy, creep in.

Those who may be led by the perusal of this book to desire more detailed information of any persons or incidents, can obtain it by consulting such works as are referred to in the text and in the foot-notes, which may usually be seen at one or other of the great public libraries.

With regard to the plan adopted: it has been found most convenient to divide the subject into three parts, of which the first deals with the streams and spas north of the Thames; the second with those on the south side of the river; the third part being devoted to a short review of the earlier methods of transport and distribution of water by means of the conduit system; concluding with some observations upon the New River Company, from its inception as a private undertaking down to the time when it was numbered among the Great Water Companies of London. A chapter upon Holy Wells and their origin, and another upon Mineral Waters, are also included.

Beyond the information that books can give, a point is at length reached when recourse must be had to personal knowledge and unwritten, or they might be called living recollections.

My thanks are due, and are here most gratefully tendered, to all who have assisted me during the progress of my book. On occasions when personal or local knowledge could alone clear up a doubtful point or difficulty, my applications have invariably met with a courteous response, which I have greatly

appreciated. I also owe a special debt of gratitude for the ready and frequently unsolicited help which I have received at the Guildhall Library. To the librarians of many of the suburban libraries I desire likewise to express my warm acknowledgments for valuable information, and for facilities which they have afforded me in the furtherance of my work.

With regard to the illustrations: the view of Acton Wells Assembly-house has, the author believes, never before been reproduced; that of St. Chad's Well has certainly never appeared elsewhere; and the same remark applies to the drawing of the fountain at Ladywell Baths. A drawing was made by the author of the Conduit-house in Hyde Park because of the difficulty of getting a satisfactory photograph, owing to its awkward position close to the Park railings. The drawing of the pump in the churchyard of St. Dunstan-in-the-East is from an original sketch by the author.

PART I

STREAMS AND SPAS NORTH OF THE THAMES

CHAPTER I

THE WALLBROOK, AND PARTS OF THE CITY ADJACENT

Early water-supply — Walebroc — Wallbrook — Barge Yard, Bucklersbury — Dour or Dowgate — Tokenhouse Yard — Remains of tanpits — Finsbury — Subterranean aqueduct noticed by Mr. Roach Smith — Blomfield Street — All Hallows on the Wall — Bethlehem Hospital — Tower Royal Street and Cloak Lane — Channel of the Wallbrook — Roman Wall of London in relation to the Wallbrook — Bank of England: stream first reached in digging a foundation for the original building — Dowgate Hill — Churches on banks of the Wallbrook: St. Mildred's, Poultry; St. Stephen's, Wallbrook; St. John the Baptist upon Wallbrook — Halls of the Livery Companies along or near its banks — Cutlers', Dyers', Joiners', and Innholders' Halls — Bridges over the Wallbrook — National Safe Deposit: excavations on its site — Stocks Market — Langbourne Stream — Sharebourne.

FOR nearly two hundred years after the Conquest London obtained ample supplies of pure water, partly from the streams flowing near to or passing through it, and partly from wells sunk into the sands above the chalk. The river-side population doubtless found in "silver" Thames an abundant and never-failing store. In streets more remote from the river, sources more accessible were at hand. Such were the brooks, the names of which still survive in

Walbrook, Holborn (formerly Oldbourne or Holebourne), and Langbourne, though modern authorities doubt the existence of such a stream as Stow describes, the name "long borne," which he gives it, being merely based on its supposed meaning. More distant from the City—westward—were the Tybourne and the Westbourne.

Although the rapid disappearance of Old London before the inexorable march of "improvements" must always be a matter for regret, yet the very destruction and removal of ancient buildings, by laying bare large tracts, have often afforded opportunities to competent observers to elucidate problems in the early history of the metropolis which might otherwise have remained unsolved. In this way—to give an example—it has been possible to trace the course of a stream, such as the Wallbrook, with considerable exactness, and by the same means to discover, or perhaps rediscover, some ancient well or watercourse.

The first water-supply of London within the walls was in all probability furnished by the Wallbrook, which was also an important factor in the mapping out of the streets and wards. It has been generally believed that it was at no time other than a very small stream, both in regard to its width and volume, and this is doubtless true of its later history, when buildings began to line its banks, and its channel in consequence became narrow and confined; but recent investigations along its course tend to prove that it was formerly very much wider and altogether more considerable.

It appears to have formed the western boundary,

from the Poultry to Dowgate, of Londinium, the first Roman City of London, and in the time of the Romans was extra-mural. The best and most authentic account of its course is that given by Mr. F. W. Reader, whose paper, illustrated by a plan, appeared in the *Archæological Journal* (1903),[1] being written from the experience of actual excavations. The Wallbrook was formed by a number of small streams flowing from the north-east of London and meeting in the neighbourhood of Finsbury, five of which, says Mr. William Tite[2] (afterwards Sir William) are still in existence as sewers. The main stream rose in the district now represented by Hoxton, flowing in the direction of Wilson Street, and, within the walls, to the east of Finsbury, ran through the midst of the City from north to south, forming a dividing line between the thirteen eastern and eleven western Wards. In the thirteenth and fourteenth centuries the Wallbrook was an important waterway. Various derivations have been proposed for its name, and as there is always a significance in local names—they are never mere arbitrary sounds devoid of meaning—it may be well to quote some opinions on the point. Mr. J. R. Green, who devotes a considerable space in "The Conquest of England" (1884), in dealing with London, traces the name Walebroc,[3] as it is written in ancient deeds, to the

[1] "On Pile Structures in the Wallbrook, near London Wall" (*Journal of the Archæological Society*, vol. lx. pp. 137–204).

[2] "Descriptive Catalogue of Antiquities found in excavations at the New Royal Exchange, 1848," p. 25 *et seq.* (W. Tite.)

[3] So-called in 1114–33 (Chron. Ramsey, 248; Cartul. de Ramseia, i. 139, Rolls Ser.).

Anglo-Saxon *walh*, a stranger or foreigner, "from the fact that on its navigable channel the trade of the foreigner was brought up from the Thames to the very heart of the 'chepe,'[1] or market at the port or hythe (commemorated in Barge Yard), fixed by tradition in the modern Bucklersbury." That the Wallbrook was navigable up to a point not far short of the City wall on the north side, is said to have been confirmed by the finding of a keel and other parts of a boat in digging the foundations of a house at the south-east corner of Moorgate Street.

The Wallbrook was largely used by tanneries and other industries where water was requisite; extensive remains of tan-pits having been discovered in the neighbourhood of Tokenhouse Yard.

Probably the earliest mention of the stream is in the confirmatory Charter granted by William the Conqueror to the Church of St. Martin-le-Grand (1068).[2] In the Old English version of this Charter, it is described by the word *wylrithe*, meaning a rivulet (*rithe*) issuing from a spring (*wyl*), so that it was in these early times apparently nameless. The *rivulus foncium* (=*fontium*) of the Latin version of the Charter is merely a translation of the Old English

[1] Mr. J. E. Price cites entries in the Hustings Roll which show clearly that West Cheap (Cheapside), existed as one of the markets of London in 1284, that is, twenty-six years before the list of wards was compiled under the famous statute known from its opening words as "Quia Emptores." (Green, "History of the English People," i. 335, 1895.)

[2] The church was of pre-Norman times, founded by one Ingelric, in 1056. The full text of the Charter is printed in *Historical Notices of St. Martin-le-Grand*, by A. J. Kemp, 1825; and by W. H. Stevenson, in *Eng. Hist. Rev.*, 1896.

wylrithe. "The River of the Wels," as pointed out by Mr. Kingsford, is simply Stow's translation of the *rivulus foncium* of William's Latin Charter. "It is not clear," Mr. Kingsford continues, "that the words of the Charter are intended to distinguish the *rivulus foncium* near the north corner (*aquilonare cornu*) of the wall from the running water which entered the City." Mr. Lethaby[1] has argued that they were identical, and that the Well-brook is Wall Brook itself. If there was a brook draining west from the Moor, it must either have joined the Fagswell-brook, or have run through the site of St. Bartholomew's Hospital, which before Rahere's time (twelfth century) was but a marsh;[2] if so, the Well-brook might be the stream running through the Hospital to Holborn Bridge, which was covered in by licence from Edward I. "on account of the too great stench proceeding from it."[3] In any case Stow's identification of the Well-brook with Turnmill-brook is an untenable conjecture; the latter was clearly the upper course of the Fleet, or that part of the Holebourne which ran parallel with Turnmill Street.[4]

The Wallbrook in Stow's time had long ceased to be "a fair brooke of sweet water," but by continual encroachments upon its banks and casting of soilage into the stream, it had become, in his own words, "worse cloyed and choken than ever before." Mr. Loftie suggests that the Wallbrook had at least two

[1] "London before the Conquest," 1902, 45–7.
[2] Cotton MS. Vespasian, bk. ix., f. 7vo.
[3] Morley, "Bartholomew Fair," 70.
[4] Stow's "Survey of London" (text of 1603), edited by C. L. Kingsford, 1908; notes, pp. 270–1.

names, and that as the Dour (Celtic *dwr*, water, or river), it gave the name to Dowgate.[1]

Mr. F. G. Hilton Price, in his address published in the *London Topographical Record* (vol. iii. 1906), speaks of an Eastern Branch which "rose near the south end of the present New North Road, in the direction of the present Pitfield Street, Hoxton, thence by Willow Walk across the Curtain Road by King John's Court, to Holywell Lane; after this it followed a course east of the whole length of Long Alley, then by the old burial-ground of Bethlehem Hospital[2] and along Blomfield Street, somewhat to the west of All Hallows, London Wall, where it fell into the ditch of the City Wall."

Mr. Reader's plan shows that the Wallbrook came up to the Roman Wall along the site of Blomfield Street, but was in pre-Roman times very much wider than that street. His theory, with which Mr. Philip Norman, a well-known authority on London archæology, agrees, is that the Roman Wall greatly obstructed the flow of the Wallbrook, the culverts made by the Romans through the wall to carry the stream being insufficient, and that this caused the marshy land of Moorfields, and of the north part of the City within the wall, through soakage under the wall. FitzStephen, writing towards the end of the twelfth century, describes the diversion of skating indulged in by the youth of London, "when that vast

[1] "London Afternoons," W. J. Loftie, 1901, chap. iv.

[2] Its origin was the Priory of the Star of Bethlehem, established in the reign of Henry III., and which stood on the east side of Moorfields. In the year 1330 the religious house became known as a public hospital.

fen which waters the walls of the City towards the north is hard frozen." The arch of masonry under which the Wallbrook entered the City through the Wall seems to have been discovered in 1840 or 1841. The late Mr. Charles Roach Smith,[1] a leading authority on Roman London, describes the opening thus: "Opposite Finsbury Chambers,[2] at a depth of 19 feet, what appeared to have been a subterranean aqueduct was laid open. It was found to run towards Finsbury, under the houses of the Circus for about 20 feet, and at the termination were iron bars fastened into the masonry to prevent the sedge and weeds from choking the passage. The arched entrance, 3 feet 6 inches in height by 3 feet 3 inches in width, had evidently been above-ground, as quantities of moss still adhered to the masonry."

In early Roman times the Wallbrook was a stream of considerable width; records of its measurement showing the channel to have been nearly 300 feet broad at its mouth, where it joined the Thames, narrowing to about 120 feet at Moorfields. Sewerage excavations in the streets called Tower Royal and St. Thomas Apostle, and also in Cloak Lane, discovered the channel to be 248 feet wide, filled with made-earth and mud, in horizontal layers, and containing a quantity of black timber of small scantling. The form of the banks could likewise be traced, covered with rank grass and weeds. The

[1] *Archæologia*, vol. 29, 1842, "Observations on Roman remains recently found in London," by C. Roach Smith.

[2] Finsbury Chambers stood at the south-west corner of Blomfield Street and London Wall; the site is now occupied by London Wall Buildings, erected 1901–03.

digging varied from 18 feet 9 inches to 15 feet 6 inches in depth, but the bottom of the Wallbrook was never reached in those parts, as even in Princes Street it is upwards of 30 feet below the present surface One of the earliest records of the stream being reached is by Maitland,[1] in digging a foundation for the Bank of England in Threadneedle Street in 1732, on the site of the house and garden of Sir John Houblon, the first Governor. The same historian says the Wallbrook ran above-ground till about the middle of the fourteenth century, but the covering over of the stream, according to Hughson,[2] took place about a hundred years later—in 1440—when the Church of St. Margaret Lothbury was rebuilt, at which time Robert Large, Mayor in that year, contributed to the vaulting over of the Wallbrook. It seems, however, that only a part of the stream was covered over in the year just mentioned, for Stow says: "Order was taken in the 2nd of Edward IV. (1462), that such as had ground on either side of Wallbrooke, should vault and pave it over as far as his ground extended." From the top of Dowgate, an open channel existed to the Thames as late as 1574, Stow recording that the water at this part had "such a swift course that in the year 1574 a lad of eighteen years, minding to have leapt over the channel, was borne down that narrow stream towards the Thames with such violent swiftness as no man could rescue or stay him." From this it is evident that the stream could not have been very wide hereabouts. The

[1] Maitland's "History of London," 1739, p. 507.
[2] Hughson's "History of London," 1806, vol. iii. p. 51.

portion of the Wallbrook which traversed the fields towards Hoxton continued its course above-ground long after that within the city had been covered over, as is shown in Ralph Agas's map of London,[1] wherein it is seen emptying itself into the City Ditch just to the east of the Church of All Hallows on the Wall. The course of the Roman Wallbrook seems to have been generally the same as that which it took in mediæval times. "It is well defined," says Mr. Lethaby, "by three churches: St. Mildred, Poultry; St. Stephen (formerly on a different site on the west or right bank, whence it was removed to the present site in 1429); and St. John the Baptist, all super Wallbrook." The last-named church was destroyed in the Great Fire and not rebuilt. A memorial, which stands on the north side of Cloak Lane, near the east corner, serves to mark its site. St. Margaret Lothbury also stood above the Wallbrook on vaults.

The halls and properties of some of the City companies were situated along or near the course of the Wallbrook, namely those of the Skinners, the Dyers, and the Tallow Chandlers on Dowgate Hill, and of the Innholders in College Street, formerly called

[1] The commonly accepted date—1560—inscribed upon the reproductions of the Agas map is manifestly wrong, because it shows St. Paul's Cathedral without its spire, which existed down to 1561, in which year it was struck down by lightning. Mr. W. H. Overall, F.S.A., one of the leading authorities on the question, doubts Agas's connection with the map, but thinks if he were the originator it could not have been done before 1591. From internal evidence, "we may take it," says Miss Mitton ("Maps of Old London," 1908), "that the original map was made some time in the latter half of Elizabeth's reign, and it is probable that it was done by Agas."

Elbow Lane. The Cutlers were in Cloak Lane. The direction taken by the Wallbrook after its passage through the wall has been found by recent investigation to be considerably more to the east than was supposed by Mr. J. E. Price, and shown in his plan of its course.[1] Taking Mr. Reader's plan as a guide, it is there seen that after crossing the street of London Wall, it curved slightly to the westward, passed along Little Bell Alley (now Copthall Avenue) through Tokenhouse Yard and across the churchyard of St. Margaret Lothbury, under the church, thence through what is now the north-west corner of the Bank of England. Crossing Princes Street its course was beneath Grocers' Hall and the Church of St. Mildred, Poultry,[2] where at a depth of 16 feet it ran in Maitland's time (*circa* 1739) "a great and rapid stream." From the Poultry it passed to the west of the Stocks' Market (which occupied the ground now covered by the Mansion House, built 1739–41), flowed down the present Wallbrook Street, crossed Budge Row near its eastern end; then under the present new Cannon Street to the west of the Church of St. John by Wallbrook. It again wandered westward, nearly as far as the Church of St. Michael Paternoster Royal; then it passed eastward under Little College Street, south over Thames Street, and thence running between

[1] "Roman Antiquities recently discovered on the site of the National Safe Deposit Company's premises, Mansion House, London." (J. E. Price, 1873.)

[2] The ship which formed the vane on the tower of this church has been referred to the stream which flowed under it. The second church—there were three—was rebuilt on an arch over the Wallbrook in 1456.

Joiners' Hall Buildings and Friar's Alley it reached the Thames at the little port of Dowgate.

The Wallbrook was spanned by several stone bridges, for which special keepers were appointed. One was near London Wall, next to the Church of All Hallows; another a little to the south. In the year 1300, 28th of Edward I., both these bridges were ordered to be repaired, for which the Prior of the Holy Trinity within Aldgate, was liable for the first, and the Prior of the New Hospital of Our Lady, that is, St. Mary Spital without Bishopsgate, for the second. In 1291 an inquiry was held as to the repair of a bridge near "the tenement of Bokereles-bery." Over against the wall of the chancel of the Church of St. Stephen was yet another, and Horse-shoe Bridge was situate where the brook crossed Cloak Lane by the Church of St. John the Baptist. Other structures have been brought to light in connection with the Wallbrook. Mr. J. E. Price, whose name has been already mentioned, published in 1873 the results of his observations during the building of the National Safe Deposit Company's vaults, when a complete section of a portion of the ancient watercourse of the Wallbrook was disclosed, and also the wooden piling placed along the line of the embankment. In the trench excavated for the foundations of the massive external walls parallel with Charlotte Row, there appeared at a depth of 25 feet from the surface-level a timber flooring supported by huge oak timbers 12 inches square, and running parallel with the stream. This was at the south corner, and may have indicated a stage or landing-place. At Dowgate Hill, at the outfall of the

Wallbrook into the Thames, the remains of another ancient landing-stage, formed of a Roman-tiled pavement, set upon timber piles with mortised jointing, was discovered in 1884. The stage stood on the left bank of the Wallbrook, facing it.

The writer of a chapter in "Modern London," printed for Richard Phillips in 1805, says that he saw the Wallbrook in November, 1803, "still trickling among the foundations of new buildings at the Bank."

The construction of Cannon Street Railway Station, opened in 1866, necessitated the excavation of the site of the Steel Yard, formerly occupied by merchants of the Hanseatic League, whose trade monopolies were abolished in the reign of Queen Elizabeth. This was found to have been situated on the "filling"[1] of the eastern side of the ancient stream, near where it emptied itself into the Thames. At Barge Yard, during the construction of Queen Victoria Street in 1871, a barge was found buried in the mud, still containing the calcined remains of its cargo of corn, showing that the barges came up to this point to discharge their contents. Recent excavations for the building of the Northern Assurance Company at the south-west corner of Moorgate Street, disclosed a subsoil of firm Thames ballast, and similar ballast was also found under Parr's Bank in Bartholomew Lane; but between these two points mud is found sometimes to a depth of 30 feet. The dividing line of gravel and mud passes through Austin Friars, and there are unmistakable indications that the

[1] The word "filling" is here probably used to express an embankment of stone, gravel, earth, &c.

stream (of Wallbrook) at this point flowed through and drained a lagoon, or morass, bounded by Coleman Street on the one side and Old Broad Street on the other.[1] Thus the Bank of England and the Mansion House are both built on the alluvium deposited by the Wallbrook.[2]

Writing upon the Ward of Langbourne[3] in 1897, Mr. W. Sweetland points out that the name is written "Langeford"[4] in a list of the Wards of the City, dated about the year 1285, and contained in Letter Book A. He thinks, however, the scribe wrote "Langeford" for "Langbourne," especially as in the Inquisition in the Hundred Rolls, ten years

[1] The "Buried Rivers of London," a paper read December 13, 1907, at the Auctioneers' Institute by Mr. J. G. Head, F.A.I.

[2] At the time of the collapse of a portion of the roof of Charing Cross Railway Station (December 5, 1905), particulars of the geological formation in the vicinity were published in the *Standard*. The alluvial deposits at the bottom of Craven Street, close to the wall of the station, are given as follows, the information having been obtained from an official of the Jermyn Street Museum. The deposits are similar in character to those of the Wallbrook described in the text.

	Ft.	In.
Made ground	19	0
Mud...	10	6
Ballast	3	6
Sand	12	0
Total	45	0

London Clay.

[3] Old Lombard Street, which extended to the north-east corner of the Mansion House, where the Stocks' Market stood, was known as Langbourne Street for a generation after the Lombards were allowed to settle in it in the thirteenth century.

[4] The Ward appears as "Langeburn" in 1293 (Cal. Wills, i. 702–3).

earlier in date, the Ward is twice mentioned by its present name. Mr. Sweetland then quotes from Stow, who speaks of the marshy nature of the eastern end of the Langbourne Ward, and that this fen was the source of the brook, which "of old time breaking out in Fenchurch Street, ran down the same street and Lombard Street to the west end of St. Mary Woolnoth's Church, where turning south, and breaking into shares, rills, or streams, it left the name of Share-borne Lane (Sherborne Lane) or Southborne Lane, as I have read, because it ran south to the River of Thames." Stow closes his notice by saying that the Langbourne had been long since stopped up at the head, and the rest of its course filled up and paved over, "so that no sign thereof remaineth more than the name of it." Such a frank admission as this seems to show that the description was as traditionary to him as it is at the present day.

The Sharebourne, which Stow connects with the Langbourne, is most probably another equally mythical stream. Sir William Tite, bringing his practical knowledge to bear upon the subject, demonstrates that the Langbourne, if it ever existed at all as a streamlet, did not run in the direction so explicitly described by Stow. It could not really have flowed from Fen Court westward by way of Lombard Street, for the simple reason that the ground "rises upwards of 3 feet from Mincing Lane to Gracechurch Street; and not only is the present surface thus elevated, but the ancient surface, though it lies 17 feet below, has

the same inclination. In excavating for sewers in Gracechurch Street, though the traces of the Langbourne were carefully sought for, no indications could be found of a stream having crossed it. As, however, there doubtless existed some foundation for the tradition of the reported course of the Langbourne, it may perhaps be regarded as having been an ancient artificial trench, all traces of the real direction of which were effaced at some very early period in the history of the metropolis." The testimony of ancient documents tends to support the views of most modern writers in this connection. In the Calendar of Letter Books in the Guildhall Library, ranging from the twelfth to the sixteenth centuries, the name Langbourne is frequently met with, but invariably with reference to the Ward, not to the Stream.

Like the "Langborne," the "Shareborne" rests solely on Stow's conjectural etymology. The name first occurs (as noticed by Mr. Lethaby in "London before the Conquest") in 1272 as "Shitteborne lane," and so continues for two centuries with variations like "Schiteborou lane," and "Shiteburgh lane" (Watney, "Account of St. Thomas Acon," 289; Cal. Wills, 1, 13, 162, 171, 220). "Shirborne lane" appears in 1467, and "Sherborne Lane" in 1556 (id. ii. 586, 666).[1]

[1] Kingsford's edition of Stow's "Survey," vol. ii.; notes, p. 307.

CHAPTER II

THE HOLEBOURNE (OR FLEET), TYBOURNE, WESTBOURNE, AND SERPENTINE

Fleet River—Ditch—Bridge—Turnmill Brook—River of Wells—Holebourne (or Fleet): its source and direction traced—Blemund's Ditch—Tybourne Brook: its course described—Marylebone Lane twice crossed by it—Formed a delta at Thorney Island, Westminster—Kilburn Stream, an affluent of the Westbourne—Aye or Eye Brook—Eia Estate—Bayswater Brook, a name applied to the Westbourne—Course of the stream defined—Serpentine: formed at the instigation of Queen Caroline—Old maps of Middlesex.

OUTSIDE the walls of the City, in what are now the western suburbs, were three great brooks; the Hole-bourne, the Ty-bourne, and the West-bourne, all issuing from the uplands of Hampstead and Highgate. Of these, the most important to the citizens of London was the Hole-bourne[1] (whence Holborn), expressing the burn in the hollow or ravine. One writer, Mr. J. G. Waller, points out that the holes that gave the Saxon

[1] The Oldborne or Hilbourne, of Stow, but, as pointed out by Mr. Kingsford, if Oldborne were correct the original form would be Ealdborne. In early documents it is always Holeburne or Holeborne. Holeburne, the stream, occurs in Domesday, i. 127, and in a Charter of Henry II. (Mon. Ang. iv. 85) and Holeburne Strate in 1251 (Hist. MSS. Comm., 9th Rep. 3).

VIEW OF THE MOUTH OF THE FLEET, *CIRCA* 1765.

Guildhall Art Collections.

To face p. 41.

name to the Holebourne are still marked by the sites of Hockley-in-the-Hole, now Ray Street, Clerkenwell—and Black Mary's Hole, Bagnigge Wells. A part of the depression here suggested is particularly noticeable near Farringdon Station, on the Metropolitan Railway, which, in fact, runs in places in the old bed of the stream, and also in Farringdon Street, where, with the side-streets rising on either hand, one can imagine how it had eroded its channel between the high banks on its way to the River Thames.

In its lower course the Holebourne went by the name of the Fleet,[1] by which it was best known to Londoners. Like the Wallbrook, it was navigable for small ships and barges for a short distance above its mouth. The names of Seacole Lane and Newcastle Lane bear witness to the fact of its navigability, and when De Keyser's Hotel was rebuilt in 1871 the timber camp-sheeting of old Bridewell Dock was found beneath the foundations. Early in the twelfth century the district beyond the Fleet is called ultra Fletam.[2] Henry II. gave to the Templars a site for a Mill super Fletam juxta Castelum Bainard, which

[1] A fleet is either that which is afloat, or a place where vessels can float (from the Anglo-Saxon verb *fleotan*, to float or swim), or where water fleets or runs. Hence the names Ebbfleet, Northfleet, Portfleet, &c. The word vlei, which the Boers of the Cape use for the smaller rivers, is the same word fleet (Dutch, *vliet*), in a somewhat disguised form. ("Words and Places," Isaac Taylor, 1885, p. 184).

The natural feature to which we give the name of "fleet" may be studied in the Thames, especially at Purfleet and Winnington, the latter occupying a bend of the river remarkably similar to that at Westminster.

[2] Calendar of St. Paul's MSS.

was removed in the reign of Edward I., on the complaint of Henry Lacy, third Earl of Lincoln, that it had lessened the width and depth of water under Holebourne Bridge and Fleet Bridge. The Earl's petition is interesting, as it refers to a time when ten or twelve "navies" (ships), with merchandise, "were wont to come to Flete Bridge, and some of them to Holeburne Bridge." The result of the petition was that the creek was cleaned, the mills, which had caused a diversion of the water, removed, and other means taken for the preservation of the course. But still, as if destined to be a common sewer, it was soon choked with filth again, and the scouring of the muddy stream, which seems to have silted up about every thirty or forty years, was a continual expense to the City of London. On account of this it has been humorously but aptly described as a sort of dirty and troublesome child to the Corporation.

Lord Chesterfield was once asked by a patriotic but untravelled Parisian whether London could show a river like the Seine. "Yes," replied his lordship, "we call it Fleet Ditch."

The name of Turnmill Brook, given to the Fleet north of Fleet Bridge, was one which it justified till a comparatively recent period, as after the middle of the eighteenth century it gave motion to flour and flatting mills at the back of Field Lane, near Holborn. Turnmill Street, which runs from the west end of Clerkenwell Green to Cow Cross Street, now marks the course of the stream in the valley by Farringdon Road. In the reign of Henry IV. it is mentioned as Trylmyl Strete, in which some persons are empowered to mend a stone bridge over the river Fleet. Falstaff,

in summing up the character of Justice Shallow alludes to it as Turnbull Street, another of its variations; and it is marked in Agas's map as Turmer Street.

This river has now been spoken of under three different names; of these the Holebourne, or Holburne, seems to be the most ancient, and under that title it occurs in Domesday Book, thus: "Two cottagers belonging to Holburne paid twenty pence a year to the King's Sheriff." By Stow, and others after him, it has been called the River of Wells, but neither in the Parliament Rolls, nor in the Patent Rolls of 1307 (Edward I.) does it appear in this form, although Stow cites these documents as containing the name. The first speaks of "the watercourse of Fleet running under the bridge of Holburn," and the second calls it "the Fleet River from Holburn Bridge to the Thames."[1] Mr. Stevenson[2] believes the "*rivulus foncium*" of the Conqueror's Charter, quoted above, to be the true origin of the "River of Wells." Pennant was of the same opinion, as he states that the River of Wells *or* Wall-brook is mentioned in a Charter of William the Conqueror to the College of St. Martin-le-Grand.

The tradition that Holborn is so named after a brook—the Old Bourne[3]—supposed to have risen on the hill, a little to the west of Brooke Street, about where Holborn Bars stood, and to have flowed in an easterly direction into the Fleet River, cannot be

[1] "London Before the Conquest," W. R. Lethaby, 1902.

[2] *English Historical Review*, 1896.

[3] "The Fascination of London"—Holborn and Bloomsbury, Besant, 1903.

sustained by any evidence or any traces of the bed of a former stream, although Stow speaks positively as to its existence, but which, he says, had long been stopped up. One writer marks the course of this affluent on a plan of the district as it is supposed to have appeared in the twelfth century.[1] It is here seen to rise in Blois Pond, in the Portpoole Manor Estate (of which Portpool Lane, turning out of Gray's Inn Road, is a reminiscence), crossing Holborn a little to the west of the Bars, and running under the walls of the Earl of Lincoln's house, and of Essex House, emptying itself into the Fleet at the south-west corner of Holborn Bridge. The fact that in the early history of Bloomsbury great ditches and fosses cut up the ground, the most considerable being Blemund's Ditch, supposed to have been an ancient line of fortification, dividing the parish of St. Giles from that of Bloomsbury, may account for Stow's acceptance of the tradition. Roland Dobie, who wrote a history of the two parishes in 1829, merely quotes what Stow says as to the existence of a brook, but makes no comment.

The main source of the Fleet River was a stream fed by springs issuing from the higher parts of Hampstead Heath, and which extended from Flask Walk, down a rather deep valley (since filled up), by what is now known as Willow Road, to South End Green and the Kentish Town Fields. Other sources were near, but this was the principal source of the Holebourne, or Fleet River. This stream was joined by a smaller one from the eastern side of the Heath near where the railway station now is—and still further east ran the streamlet from the Ken (or Caen)

[1] "A Chronicle of Blemundsbury," W. Blott, 1892.

Wood Springs, joining the Fleet Brook by the present Kentish Town Road.[1]

It thus took its rise, says Mr. J. G. Waller,[2] from two distinct sources: the western arm from Hampstead Ponds, and the eastern from Highgate Ponds (which are linked together by underground pipes). Continuing from his description, these two arms formed a junction at Hawley Road, a little above the Regent's Canal. Keeping a nearly due southerly direction, and following the windings of King's Road and Pancras Road in Camden Town, the rivulet flowed on towards Battle Bridge. It then passed between Gray's Inn Road and Bagnigge Wells Road (King's Cross Road), where it made a formidable wash. Turning towards Clerkenwell Green, it passed the western side of what is now the Parcels Post Depôt, once the House of Correction, where it was joined by another stream rising near Russell Square, and its course then lay beneath Ray Street, until it reached Farringdon Road, and thence, with few bendings, to Holborn Bridge by Farringdon Street, where it ran between high banks which, as it neared its outfall, gradually fell away, until it joined the Thames through the low-lying ground, now called Whitefriars, at a spot on the west side of the present Blackfriars Bridge. In George II.'s reign the Fleet Ditch—it was so called as early as the reign of Edward I.[3]—

[1] "Hampstead Wells," G. W. Potter, 1904, pp. 3, 4.

[2] J. G. Waller, Trans. London and Middlesex Arch. Soc., vol. vi., 1875.

[3] In an Inquisition held by the Mayor and Sheriffs of London—Edward I. 1277–8—as to property belonging to the Archbishop of Canterbury near the Flete Ditch.

had become so intolerable by pollution that it had to be covered up out of sight, and was finally degraded to the purpose of a sewer. In July, 1840, Mr. Anthony Crosby accomplished the somewhat hazardous feat of exploring the noisome stream, while collecting materials for a graphic history of the Fleet River, but which unfortunately he did not live to finish. His drawings and manuscripts were purchased for the London Library. "There still remain," writes Palmer (about 1870) "a few yards visible in the parish (of Pancras) where the brook runs in its native state. At the back of the Grove in Kentish Town Road, is a rill of water, one of the little arms of the Fleet, which is yet clear and untainted."

The name of the smallest of the three brooks—the Tybourne—is made up of pure Saxon elements. In the Charter of King Eadgar, anno 951 [1] (which was a confirmatory grant of land to the Collegiate Church of St. Peter at Westminster), it is written Teo-burna. The termination *burna* (bourne or brook), is well known, but the prefix *teo* Mr. Waller finds not so easy to determine. However, the name of the brook being evidently suggested by its movements at this part of its course; whether *teo* means a duplication, as in "two" or "tie," or the alternative, an enclosure, in allusion to its two arms forming a delta enclosing

[1] The date of this Charter is at least six years before King Eadgar ascended the throne, according to the Saxon Chronicle, and ten years before Dunstan, who is called in it Archbishop, came to the See of Canterbury. Other anachronisms have been pointed out in this Charter, which have led to its being considered as the fabrication of the monks. (Dugdale's Mon. Angl., vol. i: p. 266.)

the ancient Thorney Island; either of these interpretations would appear to be equally applicable.

The Tybourne took its rise at the southern side of Hampstead, in fields known as "Shepherds" or "Conduit fields," from a conduit which covered the spring. The spring was drained off early in the eighteen hundred and eighties by the tunnel which passes close by, through which the Hampstead (North London) Railway is carried. Following the line of Fitzjohn's Avenue to Belsize, the stream then skirted the west side of Regent's Park. Its course from here to Oxford Street is not marked on any known map; a portion of it only is seen on one by William Faden (1785), in which it is shown as taking a sweep westwards, bending round again to the east, and up to the then stables of the Horse Guards, near the site of Baker Street Bazaar. From here it may be faintly traced towards Marylebone Lane, which it crossed twice, when it becomes again visible in the maps of Lea and Glynne (1777) and others. Crossing Oxford Street[1] near Stratford Place, it made its way by Lower Brook Street and the foot of Hay Hill (possibly so called from a farm in the neighbourhood), through Lansdowne Gardens, down Half Moon Street and the hollow of Piccadilly, by a diagonal line to the Green Park, through which it flowed to the front of Buckingham House, where it was covered in from view. It then pursued its course down what are now St. James Street, Orchard Street, and

[1] The maps of Morden and Lea, dated 1690 and 1700, show that the highway now called Oxford Street crossed by a bridge the stream which in them is nameless, but in later plans is variously called Aye Brook or Tybourne.

College Street, by the walls of the monastery of Westminster, until it fell into the Thames. The other branch of the Tybourne, from the front of Buckingham Palace, swept westwards, forming the ancient boundary of the City of Westminster, crossing Vauxhall Bridge Road and Grosvenor Road and falling into the Thames.

In the later plans and maps the Tybourne is variously called Aye Brook or Eye Brook,[1] from the ancient estate of Eia, nearly 900 acres in extent, which reached from the Bayswater Road to the Thames: in the survey by Morden and Lea (*temp.* William and Mary) it is marked "A Brooke," and in "Leland's Itinerary" (1770) "Mariburne Brook."

As a proof of its continued existence, it may be mentioned that in Oxford Street it was tapped by the engineers of the Central London Railway, familiarly known as the "Twopenny Tube" (opened in 1900), causing much delay in their work. To the proximity of the same stream, St. Cyprian's Church, Glentworth Street, Dorset Square, owes the great depth of its foundations.

The Westbourne was probably larger than the Holebourne; it is marked "Bayswater Brook" in Greenwood's map of 1824–7. Some of its tributary springs were close to those of the Tybourne, so that, as pointed out by Mr. Waller, a little difference in the levels would have made the latter merely a tributary. The farthest of its sources of supply was formerly marked by a small pond on the south-western side of

[1] In the Crace Collection there is a plan of Stratford Place, showing Ayre (*sic*) brook before it was covered in. (Cat., p. 100, No. 25.)

Hampstead Heath. The next was within the village, near Frognal Estate, with an arch over it. The main stream flowed westward through meadows towards the Great North Road, receiving a small affluent, the Kilburn. Leaving the nunnery of that name, it crossed the Edgware Road beneath an ancient thirteenth-century bridge, into low-lying meadows, receiving another affluent from Willesden Lane. It then flowed for some distance in a direct though sinuous course, when it bent almost at right angles, and following the trend of the present Cambridge and Shirland Roads, passed under the Grand Junction Canal. From here it proceeded parallel with the Edgware Road, through the once rural Westbourne Green, a part of which was almost on the spot where Royal Oak Station now is, and passed Craven Hill [1] on the west, where formerly stood the Pest House, marked so prominently on Rocque's map. It then formed the main body of the water of the Serpentine.

A few words as to the formation of this fine sheet of water. It is probably known only to the few that it was at the instigation of Queen Caroline, Consort of George II., that the Westbourne, or rather the pools in its bed, of which there were eleven altogether, was dammed up and converted into a lake of some 40 acres (not 50, as generally reputed), about 7 furlongs in length by about 200 yards in width towards the eastern or Knightsbridge end. It was named, not very appropriately, the Serpentine River, though the outline 170 years ago may have presented more frequent and serpent-like windings than are now

[1] One of the places occupied by the citizens of London during the Plague.

seen in its course. The making of it—a work of some magnitude—is described very fully by Mr. W. L. Rutton in the *Home Counties Magazine* for 1903, who goes into all the minutiæ of the charges and expenses incurred in the work.[1] In Rocque's map (1746) the Serpentine is called the New River. The Westbourne continued to supply the Serpentine up to 1834, when it was cut off, the water having become too impure for feeding it, owing to the drains of the houses finding their way into the stream. Emerging at the lower end of the Serpentine, at the cascade not far from Hyde Park Corner, the Westbourne was crossed at Knightsbridge by a stone bridge,[2] the situation of which was between Knightsbridge Terrace and the house occupied as the French Embassy, and a part of it existed in 1857 under the road at Albert Gate. Crossing the Great Western Road, it passed along in a line parallel with Sloane Street, behind the east side of Lowndes Square and Cadogan Square—a district named, up to 1825, the Five Fields, on which were a few market gardens. In R. Horwood's plan of London (1799) it is shown in these parts dividing Chelsea parish from St. George's parish. Bending to the right, the stream passed under Grosvenor Bridge, where it divided and emptied itself into the Thames near Ranelagh Gardens by two mouths. The eastern course was stopped up when Grosvenor Canal was formed, the

[1] "The Making of the Serpentine," W. L. Rutton, *Home Counties Magazine*, vol. v., 1903.

[2] Walford, in "Old and New London," vol. iv., ed. 1902, reproduces a drawing of the outfall of the Serpentine at Knightsbridge in 1880, from the Crace Collection.

head of which, forming a large basin, is now entirely covered by the Victoria Railway Station. The western mouth is the entrance to the Ranelagh Sewer, into which the stream had for many years degenerated. By 1856–7 the whole of its course was covered in, although part of it was open so late as 1854. The Westbourne was occasionally a cause of annoyance to the inhabitants of Knightsbridge through its overflowings after heavy rains; notably in 1768, when it did great damage, undermining the foundations of some of the neighbouring houses.[1]

The stream (or sewer) of the Westbourne is carried in a large conduit over the District Railway at Sloane Square Station.

The old maps of Middlesex, *e.g.*, those of Norden, 1593; Speed, 1610, which was an augmentation of Norden; Seller, 1710; Morden, 1730; and Rocque, 1741–5, show but two streams—the Holebourne and the Westbourne. The Tybourne, probably from its being of less volume, is not figured, although it was important at an early period, as from its springs a supply of water was conducted to London.

Robins, in "Paddington, Past and Present" (1853), contends that the names Tybourne and Westbourne were given to the same brook—an opinion opposed to those of all others who have studied the question. It cannot be denied that Mr. Robins has laboured hard to prove his case, and that his arguments in support of it carry some weight. In the endeavour to show that the two streams were really one and the

[1] "Memorials of the Hamlet of Knightsbridge," by H. G. Davis, 1859, pp. 20, 21.

same, he refers to an Act of Parliament so late as 1734,[1] in which "two messuages and six acres of land lying in the common Fields of Westbourn, in the said parish of Paddington," and three other acres in the same fields, are described as being "parcel of the manor of Tyburn, and called Byard's Watering Place." The Serpentine he takes to have been first called Tybourn, then Westbourn, then Ranelagh Sewer; while the stream which crossed Oxford Street, west of Stratford Place, first bore the name of Eyebourn, then Tybourn, then King's Scholars Pond Sewer. The only vestige of the Westbourne now remaining is to be seen at the southern extremity of St. Luke's parish, Chelsea, where, having become a mere sewer, it empties itself into the Thames about 300 yards above Chelsea Bridge.

[1] 7 Geo. II., cap. xi.

CHAPTER III

HOLY WELLS AND WELL-WORSHIP

Holy wells—Enactments against offerings at springs in Saxon times—Survival of superstitions relating to them—Flower-dressing of wells: a custom still observed at Tissington in Derbyshire—Offerings of coins—Holy wells in London.

THE earliest historian of London—William Fitz-Stephen[1]—writing towards the end of the twelfth century, presents us with a vision of London as he saw it, and speaks enthusiastically of the cornfields, pastures, and delightful meadows in the northern suburbs, and of certain excellent springs which rose at a short distance from the City, mentioning in particular Holy Well, Clerks' Well, and Clement's Well ("fons sacer, fons clericorum, and fons Clementis"), then much frequented by scholars and City youths in their walks on summer evenings. Stow says that in his time—Elizabeth to James I.—

[1] His graphic description of London in the twelfth century forms the preface to his most important work, "Vita Sancta Thomae," and is entitled "Descriptio Nobilissimæ civitatis Londoniæ." It was written between the years 1180 and 1182. Printed in Stow's "Survey of London," in "Leland's Itinerary," published by Hearne, third edition, 1770, and by Dr. Pegge in 1772. It also occurs in the "Liber Custumarum," vol. ii., Part I. (Guildhall Library).

every street and lane had "divers fayre welles and springes," which served the City with "sweet and fresh water." To name a few of these: there were wells of drinking water in Broad Street, at Aldgate, at St. Antholin's Church, Watling Street, at St. Paul's Churchyard, at the Grey Friar's, at Aldersgate, and in many private houses. But since Stow's "Survey" was completed, many destructive agencies have been at work, particularly the Great Fire of 1666, which wrought such fearful havoc in London, about five-sixths of which was laid waste; so that any well or fountain within its range was choked, and afterwards built over and forgotten. Those specified by Fitz-Stephen, however, lay beyond the devastated area, and thus escaped destruction, and their sites can even now be pretty closely identified.

Before proceeding with the detailed descriptions, there is one feature in connection with streams and wells which cannot be altogether ignored, and that is the prominent place they held in former times among nature-religions. There is an extensive literature dealing with the folklore of holy wells and streams, the subject having of late years met with increasing recognition from students of anthropology and of comparative religions; but this is not the place for an examination into such a wide field of research; and so the reader need only to be reminded here of the theory of the descent of the churches from the holy stones (circles, dolmens, cromlechs, menhirs, &c.) which they replaced, and of the close association of wells with these sacred erections. A few points may, however, be touched upon relative to this fascinating subject. There are instances of wells near stone

circles in Cornwall, Aberdeenshire, in County Kerry, and in the Isle of Man. The number of holy wells and streams in Britain is legion. Mr. Gomme says[1] that well-worship prevailed in every county of the three kingdoms.

It seems now to be generally accepted that well-worship in Britain originated long before the Christian era; that the Christian missionaries found it in vogue on their arrival, and tolerated it at first, and utilised it afterwards for their own ends.[2] But in the times of transition from paganism to Christianity the higher Christian authorities made protest against the old worship, passing laws to forbid adoration and sacrifice to fountains—as when Duke Bretislav forbade the still half-pagan country-folk of Bohemia to offer libations and sacrifice victims at springs, and in England there were prohibitions by the Saxon clergy, and Ecgberht's Pœnitentiale proscribes the like rites: "If any man vow or bring his offering to any well"—"If one holds his vigils at any well."[3] But the old veneration was too strong to be put down, and with a veneer of Christianity, and the substitution of a Saint's name, water-worship has held its own to our day. To prove this, it is only necessary to say that in remote country places there are to be found, even now, persons who openly avow their belief in the miraculous properties of holy wells, although one would suppose that in these enlightened times such superstition could hardly exist. Yet as a proof of the persistence of a

[1] "Etymology in Folklore," 1892.

[2] "Stonehenge and other British Stone Monuments," Sir Norman Lockyer, 1906.

[3] "Primitive Culture," E. B. Tylor, 1871.

deeply rooted belief, there are wells in some parts of Cornwall, for instance, which are popularly supposed to possess supernatural powers over their votaries.[1]

Streams, rivers, fountains, springs, and wells have all been accounted holy,[2] and possessed each its nymph or its god, who exacted sacrifice or offering of some kind. Wells were sometimes dressed with flowers, as at the village of Tissington, near Ashbourne, in Derbyshire, where the custom of garland-dressing of the well is still observed on every anniversary of the Ascension. At a well still called Bede's Well, near Jarrow, Northumberland, as late as 1740, a custom prevailed to bring children troubled with any disease or infirmity. In the south (Teutonic England) an example is found where some details of local ritual are still preserved. This is at Bonchurch in the Isle of Wight, where on St. Boniface's Day, June 5th, the well is decorated with flowers.[3]

In other cases wells were resorted to for the purpose of obtaining change of weather, or good luck, and to effect this offerings were made to them to propitiate their guardian gods and nymphs. Coins have been found by the hundred in wells into which they were thrown in order to read an oracle from the troubling of the waters : there were superstitions about water drawn on certain nights ; there were wishing wells, and there were wakes of the well.

[1] "Miraculous Wells," C. N. Bennett—*Good Words*, September, 1905.

[2] The earliest holy well known to history is the famous well at Heliopolis, where Rā used to wash himself, and Piankhi, B.C. 740, went and washed his face in it.

[3] "Tour in the Isle of Wight," Chas. Tomkins, 1796, II. 121.

Many of the ancient holy wells were frequented by people with skin diseases or suffering from complaints of the eyes. This arose in many cases from their chalybeate water—known, but not understood. "I have found," says Mr. T. W. Shore, "sesquioxide (now called ferric oxide) of iron, a common ingredient in holy wells, now frequented by people for the purpose of washing mangy dogs; so greatly has the character of many of these ancient holy wells fallen from their former reputation." [1]

That some among the historic wells in and around London were deemed sacred is evidenced by their dedication to Saints of the early Christian faith, as well as from their close proximity to churches, *e.g.*, those of St. Bride and St. Clement in the west, Clerks' Well (or Clerkenwell) north of the City, near which was the priory church of St. John of Jerusalem; while eastward was the Holy Well, Shoreditch, near the ancient Priory of Halliwell (or Holywell). Some of the outlying districts of the metropolis, such as Muswell Hill, Tottenham (St. Eloy), and Ladywell, also had their holy wells.

Having their existence near some abbey, monastery, or religious house, the holy wells often formed, by the attraction of real or fancied virtues, no trifling addition to the revenues of the pious dwellers in those sacred edifices.

[1] "The Anglo-Saxon Settlement round London," &c., by T. W. Shore, Trans. London and Middlesex Arch. Soc., vol. i., 1905.

CHAPTER IV

CENTRAL LONDON GROUP OF WELLS AND SPAS

St. Bride's Well—Milton's lodgings in the churchyard—Clement's Well—Stow's evidence as to its position and identification—Allusions to it by later writers—Evidence of the Ordnance Survey maps—Holy Well, Strand—Remarks of various observers regarding its true position—Gray's Inn Lane—Bagnigge House and Wells—Origin of the name—Nell Gwynne at Bagnigge House—Properties of the water—Battle Bridge—Black Mary's Hole—St. Chad's Well: its many vicissitudes—Pancras Wells and garden—Visit of Pepys thereto—Holt Waters—Sadler's Music House and Wells—Sadler succeeded by Miles and Forcer—The Theatre and notable performers—It sinks to a low-type music-hall—Islington Spa, or New Tunbridge Wells—At one time a fashionable resort—The proprietor's house—Rosebery Avenue—London Spaw—New Wells near the latter—Priory of St. John of Jerusalem—Clerks' Well—Miracle or Mystery Plays performed there—St. Mary's Nunnery, Clerkenwell—Hockley in the Hole—Skinners' Well—Fagswell—Godewell—Loder's Well—Radwell—Crowder's Well——Monkswell—St. Agnes le Clere—Well or pool—Mineral Baths—Perilous Pond, later called Peerless Pool—Swimming-bath and fishing-pond—Swimming-bath survived to nineteenth century.

ON the right bank of the Fleet, close to its outfall into the Thames, stood a large castellated building, half fortress, half palace, called Bridewell, in which, from the reign of Henry III.,

if not of John, the sovereigns of this realm were lodged and kept their Courts. There are few particulars of the spot on which it stood, but like the neighbouring Savoy, it was probably foreshore, which, under the riparian laws, belonged to the Crown. Stow says: "This house of St. Bride's, of later time, being left, and not used by the Kings, fell to ruin, . . . only a fayre well remained here."[1] The palace,[2] described as a stately and beautiful house, was rebuilt by Henry VIII., for the reception and accommodation of the Emperor Charles V. and his retinue, when he visited England for the second time in 1522. In 1553 Edward VI. gave it over to the City of London, to be used as a workhouse for the poor, and a house of correction "for the strumpet and idle person, for the rioter that consumeth all, and for the vagabond that will abide in no place." The old palace was burnt down in the Great Fire. Many views of it are extant as it appeared previous to its destruction. The well was near the church dedicated to St. Bridget (of which Bride is a corruption; a Scottish or Irish saint who flourished in the sixth century), and was one of the holy wells or springs so numerous in London, the waters of which were supposed to possess peculiar virtues if taken at particular times. Whether the Well of St. Bride was so called after the church, or whether, being already there, it gave its name to it, is uncertain, more especially as the date of the

[1] Strype's Edition of Stow, 1720.

[2] The whole 3rd Act of Shakespeare's play of "Henry VIII." is laid in the Palace of Bridewell.

erection of the first church of St. Bride is not known and no mention of it has been discovered prior to the year 1222. The position of the ancient well is stated to have been identical with that of the pump in a niche in the eastern wall of the churchyard overhanging Bride Lane. William Hone, in his "Every-Day Book" for 1831, thus relates how the well became exhausted: "The last public use of the water of St. Bride's well drained it so much that the inhabitants of the parish could not get their usual supply. This exhaustion was caused by a sudden demand on the occasion of King George IV. being crowned at Westminster in July, 1821. Mr. Walker, of the Hotel, No. 10 Bridge Street, Blackfriars, engaged a number of men in filling thousands of bottles with the sanctified fluid from the cast-iron pump over St. Bride's Well, in Bride Lane." Beyond this there is little else to tell about the well itself, but the spot is hallowed by the memory of the poet Milton, who, as his nephew, Edward Philips,[1] records, lodged in the churchyard on his return from Italy, about August, 1640, "at the house of one Russel a taylor." The house itself was a small tenement, which was burnt down in 1824: the back part of the old office of *Punch* occupied its site.

There were at least two wells of importance in the near neighbourhood of St. Clement Danes Church, in the Strand. The earliest mention of the well of St. Clement was made by the Anglo-Norman chronicler, FitzStephen, in his "History of

[1] "Life of Milton," by Edward Philips, 1694, p. 16.

London," prefixed to his Life of Becket (written between the years 1180 and 1182), where in the oft-quoted passage, he describes the water as "sweete, wholesome, and cleere," and the spot as being "much frequented by scholars and youths of the Citie in summer evenings, when they walk forth to take the aire."

Turning to Stow (1598), a fairly correct idea of the position of the holy well may be formed from his remarks. Referring to Clement's Inn, he defines it as "an Inne of Chancerie, so called because it standeth near St. Clement's Church, but nearer to the faire fountain called Clement's Well." As to its condition at the time he wrote, he says: "It is yet faire and curbed square with hard stone, and is always kept clean for common use. It is always full and never wanteth water." Seymour writes of it in his "Survey of London" (1734–35) as "St. Clement's pump, or well, of note for its excellent spring water." Maitland (1756) says of it: "The well is now covered, and a pump placed therein on the east side of Clement's Inn and lower end of St. Clement's Lane." This appears to be the first specific reference to the change from a draw-well to a pump. Hughson (1806–09), and Allen (1827–29) both allude briefly to the well, but the following authors say nothing about it: Northouck "A New History of London" (1773); Pennant, "Some Account of London" (1790 and 1793); Malcolm, "Londinium Redivivum" (1803–07); and Riley, "Memorials of London and London Life in the Thirteenth, Fourteenth, and Fifteenth Centuries" (1868).

Among the more modern writers, John Sanders in

his "Strand" article, published in Knight's "London" (1842), says: "The well is now covered with a pump, but there still remains the spring, flowing as steadily and freshly as ever."

George Emerson (1862), in speaking of the Church, says: "It stood near a celebrated well, which for centuries was a favourite resort for Londoners. The water was slightly medicinal, and having effected some cures, the name Holy Well was applied."

John Diprose, an old inhabitant of the parish of St. Clement Danes, in his account of the parish (published in two volumes in 1868 and 1876), has this passage on the subject: "It has been suggested that the Holy Well was situated on the side of the Churchyard (of St. Clement), facing Temple Bar, for here may be seen a stone-built house, looking like a burial vault above ground, which an inscription informs us was erected in 1839, to prevent people using a pump that the inhabitants had put up in 1807 over a remarkable well, which is 191 feet deep, with 150 feet of water in it. Perhaps this may be the 'holy well' of bygone days, that gave the name to a street adjoining." Timbs says in his "Curiosities of London" (1853), "the holy well is stated to be that under the 'Old Dog' tavern, No. 24, Holywell Street." Mr. Parry, an optician in that street, and an old inhabitant, held the same opinion. Mr. Diprose, on the other hand, finds "upon examination, no reason for supposing that the holy well was under the 'Old Dog' tavern, there being much older wells near the spot." Other inhabitants believe that the ancient well was adjacent to Lyon's Inn, which faced Newcastle Street, between Wych Street and Holywell Street. In the

Times of May 1, 1874, may be found the following paragraph, which reads like a requiem: "Another relic of Old London has lately passed away; the holy well of St. Clement, on the north of St. Clement Danes Church, has been filled in and covered over with earth and rubble, in order to form part of the foundation of the Law Courts of the future." On the 3rd of September of the same year (1874) the *Standard* refers to this supposed choking up of the old well, and suggests that "there had been a misapprehension, for the well, instead of being choked up, was delivering into the main drainage of London something like 30,000 gallons of water daily of exquisite purity. This flow of water which wells up from the low-lying chalk through a fault in the London Clay, will be utilised for the new Law Courts." A contributor to *Notes and Queries* (9th series, July 29, 1899) draws attention to the following particulars from a correspondent, a Mr. J. C. Asten, in the *Morning Herald* of July 5, 1899: "Having lived at No. 273, Strand, for thirty years from 1858, it may interest your readers to know that at the back of No. 274, between that house and Holy Well Street, there exists an old well, which most probably is the 'Holy Well.' It is now built over. I and others have frequently drunk the exceedingly cool, bright water. There was an abundance of it, for in the later years a steam-printer used it to fill his boilers." An interesting account of another well, less likely, however, to be the true well, is given by the late Mr. G. A. Sala in "Things I have Seen and People I have Met" (1894), who describes the clearing of the well which was not under, but behind the "Old Dog,"

in Holy Well Street, where he resided for some months about 1840. One or two interesting things turned up, amongst them being a broken punch bowl, having a William and Mary guinea inserted at the bottom; a scrap of paper with the words in faded ink, "Oliver Goldsmith, 13s. 10d.," perhaps a tavern score, and a variety of other articles.

The erection of the new Law Courts—1874–82—which, with the piece of garden ground on the western side, cover a space of nearly 8 acres,[1] swept away numbers of squalid courts, alleys, and houses, including a portion of Clement's Inn, where the well was. Further west another large area was denuded of houses, by which Holywell Street—demolished in 1901—and nearly the whole of Wych Street (a few houses on its northern side only being left), have been wiped off the map.

In order, if possible, to obtain some corroboration of the *Standard's* statement that the spring existed in 1874, the writer applied for information on the point to the Clerk of Works[2] at the Royal Courts of Justice, who wrote that he could find no trace of St. Clement's Well, so that the report in the *Times* (quoted above) is probably correct. The water-supply to the Courts of Justice, he adds in his letter of June 13, 1907, is from the Water Board's mains, and an

[1] "The existing buildings cover 5 acres, and the remaining 2 acres have hitherto formed the pleasant green space on the Clement's Inn side, to the west. Two-thirds of this space is to be occupied by the new Court. The remaining one-third will still remain open to the public" (*Daily Telegraph*, January 13, 1909).

[2] Mr. E. Carpenter, who kindly communicated the information contained in the above paragraph to the author by letter.

underground tank, used for the steam-engine boilers, situated between the principal and east blocks, is filled partly from the roofs and partly from shallow wells in the north (Carey Street) area of the building—the overflow running into the drains.

On the Ordnance Survey Map, published in 1874, a spot is marked on the open space west of the Law Courts with the words "Site of St. Clement's Well": this spot is distant about 200 feet north from the Church of St. Clement Danes, and about 90 feet east of Clement's Inn Hall, which was then standing. The Inn, with the ground attached to it, was disposed of not long after 1884, when the Society of Clement's Inn had been disestablished.

To the north of the main thoroughfare of High Holborn, and rather more than half-way up Gray's Inn Road on the east side, was a well formerly appertaining to the Benedictine Nunnery of St. Mary's, Clerkenwell. The way to it is marked on Agas's map of the sixteenth century as a country lane (it used to be called Gray's Inn Lane), winding pleasantly between fields and hedgerows, though, strangely enough, it is recorded that it was paved so long ago as 1417. "I take it," says Mr. Tomlins, in his "Perambulation of Islington" (1858), "Bagnigge Wells was the Reddewell or Reedwell mentioned in the Register of Clerkenwell." This is doubtless identical with the Rad Well of Stow. That part of the road which followed the course of the Holebourne from Clerkenwell to Kentish Town, and lay in the valley between Clerkenwell and Battle Bridge, was called Bagnigge Vale, the river there being called Bagnigge Wash, and the wall of Bagnigge House,

Bagnigge Wall. It is to be noted that Bagnigge Wells Road (afterwards King's Cross Road), is partly in Clerkenwell and partly in St. Pancras parish: the house itself was in Clerkenwell. Until this part was drained, a great drawback was its liability to be flooded, it having been originally a swamp. About the middle of the eighteenth century, and even later, the force of the current at Bagnigge Wells was sufficient to turn the wheels of a snuff-mill. The Fleet at Bagnigge was a river as late as 1700, on which pleasure-boats might be seen, and there was nothing then to impede the torrents from the hills of Highgate and Hampstead from swelling its tide.

The name Bagnigge must have existed from very early times, for Dr. Stukeley found in a Charter of William de Ewell prebendary of Vinesbury, otherwise Haliwell, without date but made in the thirteenth century, Domino Thoma de Basnigge as one of the attesting witnesses. There was an old and wealthy family of the name of Bagnigge residing in St. Pancras in the seventeenth century, and to whom the property comprising Bagnigge House belonged. The old gabled mansion was, in the time of Charles II., literally in the country, standing on the green slope of Pentonville Hill and sheltered on all sides, except the south, by the rising grounds of Primrose Hill, Hampstead, and Islington.

Bagnigge House is claimed by some to have been the country residence of Nell Gwynne, and there is some evidence for the belief. Dr. E. F. Rimbault, writing in *Notes and Queries* in 1873, gives his impressions of a visit to the place in 1828. "I have a vivid recollection," he says, "of the Long Room,

originally the banqueting-hall of the old house—measuring nearly 80 feet by 30 feet—in which Nellie entertained the King and his brother the Duke of York with concerts, breakfasts, &c. An alto-relievo bust in coloured delft of 'Mrs. Eleanor Gwin' was over a fireplace. Old Thorogood was lessee of the wells when I first became acquainted with them." An old building called Nell Gwynne's Room stood in the garden. Mr. Samuel Palmer in his "History of St. Pancras" says: "At what period this property fell into the hands of Nell Gwynne is unknown, but that she occupied it either as a tenant—which is most probable—or received it as a gift from her royal lover, is certain." The late Mr. Peter Cunningham, on the other hand, after long and careful inquiry as to the places where she is supposed to have lived, found himself obliged to reject this as one of them.[1] An engraving described as Nell Gwynne's house, when it was in process of demolition in 1844 is given by Pinks ("History of Clerkenwell," p. 559).

There is a tradition that the place of old was called Blessed Mary's Well, but the name of the Holy Virgin having fallen into disesteem after the Reformation, the title was altered to Black Mary's Well, as it stands upon Rocque's map (1746–48), and then to Black Mary's Hole,[2] which in 1761 was described as "a few straggling houses near the Cold Bath Fields." There are those again who maintain that the later appellations

[1] "Story of Nell Gwynn," Peter Cunningham; new edition edited by Gordon Goodwin, 1903.

[2] Pinks says that in the Poor's-rate Book for 1680 one John Giles is rated for "Black Maries."

referred to one Mary Wollaston,[1] a coloured woman whose occupation was attending at a well on the opposite eminence to Bagnigge, which was among the many springs in the neighbourhood. Mr. Loftie's idea is that the name may be referred to one of the wooden Madonnas, which were destroyed at the Reformation. The Black Virgin is still to be found in some French churches—"Our Lady of Puy" being black—and it is probable that the origin of the name lies here. This group has sometimes been confused with Bagnigge Wells, but was apparently quite separate, though not far distant.

The narrator of the re-discovery of the medicinal springs was Dr. John Bevis, who in 1760 published a book which he called "An Experimental Inquiry concerning the Contents, Qualities, and Medicinal Virtues of the two mineral waters lately discovered at Bagnigge Wells near London," which, he writes, "were got into great repute."

It was in the year 1757 that the spot of ground in which the well was sunk was let to a gentleman of the name of Hughes, who was "curious in gardening, and who observed that the oftener he watered his flowers from it the worse they seemed to thrive." Tasting the water at his request, Dr. Bevis found its flavour to be like that of the best German chalybeates, having "an agreeable sub-acid tartness," and he proved it on analysis to be rich in mineral contents. This well was situated just behind the house, and was nearly two yards in diameter, the water exceedingly clear, and having a sulphurous smell as it

[1] On her death about 1687, a Mr. Walter Baynes, of the Inner Temple, enclosed the spring by a conduit.

issued out. The water of another well about forty yards north of the chalybeate, was found to possess cathartic properties, leaving "a distinguishable brackish bitterness on the palate." Dr. Bevis describes this one as a powerful purgative; a less quantity being required to be taken than perhaps of any other known in England; three half-pint glasses sufficing for a dose in most constitutions. The two wells were each some 20 feet in depth: the water was brought to one point, and thence drawn from two pumps, enclosed within a small erection called the Temple, consisting of a roofed and circular kind of colonnade, formed by a double row of pillars with an interior balustrade—a building after the style of the water-temples at the Crystal Palace, Sydenham. In the centre of the Temple was a double pump, one cylinder of which supplied the chalybeate water, and the other the cathartic water. The charge for drinking the water at the pump was threepence: half a guinea entitled the visitor to its use throughout the season. The poor had the water gratis, on producing a certificate from a physician or apothecary.

From about 1760 till near the end of the eighteenth century Bagnigge Wells was a popular resort. Some hundreds of visitors were sometimes to be found in the morning for the water-drinking. In the afternoon the Long Room and the gardens were thronged by tea-drinkers, especially on Sundays. The grounds were behind the Long Room, and were laid out in formal walks with hedges of box and holly. Arbours for tea-drinking, covered with honeysuckle and sweetbriar, surrounded the gardens; and there was a rustic cottage and a grotto, the latter a small castellated

building in the form of a hexagon, decorated with shells, pebbles, and fragments of glass. Among other attractions of the Wells were a bowling-green and skittle-alley. Three wooden bridges spanned the Fleet (locally called the Bagnigge River), which flowed through the grounds, separating the eastern from the western portions. There were seats on the banks, for such as "chuse to smoke, or drink cyder, ale, etc., which are not permitted in other parts of the garden."

Hughes, the original proprietor, appears to have remained at the Wells till about 1775; subsequently a Mr. John Davis was the lessee, till his death in 1793. In the *Daily Advertisement* for July, 1775, is the following characteristic announcement:—

"The Royal Bagnigge Wells, between the Foundling Hospital and Islington.—Mr. Davis, the proprietor, takes this method to inform the publick, that both the chalybeate and purging waters are in the greatest perfection ever known, and may be drank at 3d. each person, or delivered at the pump room at 8d. per gallon. They are recommended by the most eminent physicians for various disorders, as specified in the handbills. Likewise in a treatise written on those waters by the late Dr. Bevis, dedicated to the Royal Society, and may be had at the bar, price 1s., where ladies and gentlemen may depend upon having the best tea, coffee, hot loaves, &c."

A curious little volume called "A Sunday Ramble or Modern Sabbath-Day Journey" (published *circa* 1774) describes, among other places of recreation near town—Bagnigge Wells, which, it may be gathered had in its early days, little to boast of, being "only a small ale house, seldom visited by persons of any reputa-

tion." Under Mr. Davis's proprietorship various improvements were carried out in the gardens and permanent buildings, and in his hands it became one of the recognised summer resorts of pleasure-seeking Londoners. These included people of various degrees, with a sprinkling of aristocracy, but, like other tea-gardens and spas, Bagnigge was by no means over-exclusive or select.

As a place of entertainment Bagnigge Wells appears to have been opened earlier than is generally stated, for Dr. Rimbault pointed out in *Notes and Queries* in 1850 that Bickham's curious work, "The Musical Entertainer" (*circa* 1738) contains an engraving of Tom Hippersley, mounted in the singing rostrum, regaling the company with a song.

Among some of the versifiers of this period who noticed Bagnigge Wells was William Woty, a Grub Street writer, who issued in 1760, under the pseudonym of "J. Copywell of Lincoln's Inn," a volume entitled "The Shrubs of Parnassus," in which the following allusion is made to the springs:—

> ". . . there stands a dome superb,
> Hight Bagnigge, where from our forefathers hid,
> Long have two springs in dull stagnation slept."

Colman's prologue to Garrick's "Bon Ton" (1775), imputes a rather vulgar tone to the place:—

> "Bon Ton's the space 'twixt Saturday and Monday,
> And riding in a one-horse chair on Sunday:
> 'Tis drinking tea on summer afternoons
> At Bagnigge Wells with china and gilt spoons."

In later days Miss Maria Edgeworth, in one of her

tales, alludes to this place somewhat disparagingly in the lines :—

"The Cits to Bagnigge Wells repair,
To swallow dust, and call it air."[1]

A relic of the old house, in the shape of an inscribed stone tablet is mentioned by Dr. Bevis in 1760 as having been over an old Gothic portal, which was taken down about three years previously, the tablet being replaced over the door from the high road to the house. It is now built into the wall between two modern houses—Nos. 61 and 63 King's Cross Road —probably near the north-western limit of the gardens, and perhaps recording the actual site of Bagnigge House. The inscription upon the tablet, which, by the way, has nothing about wells in it, is as follows :—

"THIS IS BAGNIGGE HOUSE NEARE THE PINDER A WAKE-FEILDE, 1680."[2]

Some writers have inferred from this that Bagnigge Wells itself was a place of entertainment as early as 1680, but there is nothing whatever to warrant this conclusion.

The principal proprietors of Bagnigge Wells, which in the later years of its career frequently changed hands, were : Mr. Hughes in and after the year 1757 till about 1775 ; subsequently Mr. John Davis was

[1] Quoted in "Every Night Book," 1827, p. 36.

[2] "The Pindar of Wakefield" was the sign of an old inn or hostelry in Gray's Inn Road, destroyed by a hurricane in 1723. Pindar, or Pounder, meant bailiff or keeper of the pound to the manor of Wakefield.

Page Sculp.
Salubrious Waters, Tea, and Wine,
Here you may have, and also dine;
But, as ye through the Garden rove,
Beware, fond Youths, the Darts of Love.

BAGNIGGE WELLS GARDENS.

Frontispiece to the *Sunday Ramble* (*circa* 1774).

To face p. 73.

the lessee, remaining for many years. In 1813 Mr. Thomas Salter took a lease of the premises, and, becoming bankrupt in that year, Bagnigge Wells was put up for sale by auction with everything belonging to it, including the various rooms and buildings with their contents, "Nell Gwyn's house" being mentioned. The catalogue described the fixtures and fittings outside as comprising a temple, a grotto, arbours, boxes (*i.e.*, recesses for tea-tables), 200 drinking tables, &c. In the year following the place was reopened under Mr. Stock's management, the grounds being greatly curtailed. In 1818 Mr. Thorogood had the wells, and sublet them to Mr. Monkhouse (from White Conduit House), about 1831. In or before 1833 Richard Chapman was the proprietor, and John Hamilton in 1834 down to 1841.

By the close of George III.'s reign, the gardens had been curtailed of all the ground west of the Fleet, and in spite of efforts made to revive their popularity they declined in public favour, or at all events appealed to visitors of an inferior class ; the once fashionable resort sinking to the level of a threepenny concert-room. The year 1841 saw the last of the entertainments. On 26th of March of that year there was a benefit concert at which only about sixty persons were present—a sad falling off. Lewis, in his "History of the parish of St. Mary, Islington," 1842, describes Bagnigge Wells as "almost a ruin."

Several pictures of the wells are extant ; one of these, "drawn on ye spot," forms the frontispiece to the "Sunday Ramble" (1774–75). About the centre of the picture is a small, round fish-pond, in the midst of which is a fountain representing a Cupid bestriding

a swan which spouts the water from its beak. A building with a domed room and vane above it is the well-house. In 1772 an aquatinta print of Bagnigge Wells, from a painting by Saunders, was published by J. R. Smith. It represents the interior of the Long Room filled with a gay and numerous company, attired in the fashion of the period, of whom some are promenading, others are seated at table partaking of tea. The artist has, after the manner of Hogarth, well depicted the humours of the motley company.

The final breaking up of the place occurred in 1844. When Tomlins wrote (1858), the spring was preserved in the front garden of the house, No, 3, Spring Place, Bagnigge Wells Road. A modern public-house named "Ye Olde Bagnigge Wells," standing on the west side of King's Cross Road, at the corner of Pakenham Street, and the great building yard of Messrs. Cubitt, in the Gray's Inn Road, now occupy part of the site of the grounds attached to these famous wells. Their memory is yet perpetuated in Wells Street, nearly opposite Mecklenburg Square.

At the north end of Gray's Inn Road, near Battle Bridge, which, as late as 1791, is described as "a small village on the new road from Islington to Tottenham Court," was a mineral spring of great antiquity, for it was one of the holy wells, dedicated to St. Cedd or Ceadda,[1] or St. Chad, as modernised—a Saint of the English Calendar and founder of the See of Lichfield, of which he was the first Bishop.[2] He is said by

[1] *Ce* in Anglo-Saxon is pronounced like *Ch*.

[2] St. Ceadda died A.D. 673, and became in his canonisation the patron saint of medicinal springs or wells.

A. S. Foord fecit.

ST. CHAD'S WELL (*CIRCA* 1830).

From a pencil sketch in the Guildhall Library.

To face p. 74.

LIBRARIES BRENTFORD

tradition to have been cured of some awful disease by drinking the waters of a well the quality of which those at Battle Bridge were supposed to resemble. Neither the precise time nor the circumstance of the discovery of this well have been left on record, but that it was of ancient date may be inferred from the fact that, in conformity with the custom of the early ages, when each spring had its tutelary saint, this well was consecrated to St. Chad.

It was not till past the middle of the eighteenth century that the usual laudatory notices began to appear in the newspapers. One of these, dated September 10, 1762, which was perhaps the earliest, calls attention to the great number of persons who drank the waters. Ten years later, April 20, 1772, a newspaper advertisement mentions that "at the opening [for the season] of St. Chad's Wells at Battle Bridge last week upwards of a thousand persons drank the waters." The well is again mentioned with four other London wells in the *Macaroni and Theatrical Magazine* for January, 1773, p. 162. From about the middle till towards the end of the eighteenth century, the well was in considerable repute, at least locally. The gardens were then tolerably spacious, reaching a considerable way down Gray's Inn Lane, and were well stocked with fruit-trees, shrubs, and flowers.

The terms of subscription for drinking the water were £1 per annum, and 6d. each person, except on Sundays when the price was 4d. The water could also be had at 1s. per gallon or 3d. per quart. It was composed of sulphate of soda and magnesia in large quantities, and of a little iron held in solution by

carbonic acid: these ingredients made the waters "actively purgative, mildly tonic, and powerfully diuretic." One pint without salts was deemed sufficient for most persons. The water was heated in a large cauldron, and thence drawn by a cock into glasses—a most unusual treatment, as the redeeming feature in these waters is their sparkling, brisk character, which is so refreshing to the palate. By the close of the eighteenth century St. Chad's began to lose its fame as a watering-place, but it comes into notice again in 1809 as being much resorted to by the lower classes of tradespeople on Sundays.

In the early part of the nineteenth century it had a few visitors of note. Sir Allan Chambré, the judge, used to take the water, and Joseph Munden, the comedian, when he lived in Kentish Town, was in the habit of visiting the well three times a week. Mr. Alexander Mensall, who kept the Gordon House Academy at Kentish Town, used to take his pupils to St. Chad's once a week to drink the waters, and so save in doctor's bills. John Abernethy, the famous surgeon, was also a visitor.

When, in 1825, Hone visited the place he found that a general air of neglect and dilapidation pervaded it. He records his impressions in a mildly satirical vein: "Entering by an elderly pair of wooden gates, a scene opens which the unaccustomed eye may take for the pleasure-ground of Giant Despair. Trees stand as if made not to vegetate, clipped hedges seem willing to decline, and nameless weeds struggle weakly upon unlimited borders." "On pacing the garden alleys, and peeping at the places of retirement, you imagine the whole may

have been improved and beautified for the last time by some countryman of William III." "If you look upwards, you perceive, painted on an octagon board, 'Health Restored and Preserved.' Further on, towards the left, stands a low, old-fashioned, comfortable-looking, large-windowed dwelling, and ten to one but there also stands at the open door an ancient, ailing female in a black bonnet, a clean coloured cotton gown, and a check apron; . . . this is the Lady of the Well." This rather lugubrious dame divided the honours of the place with one Jonathan Rhone, who, for nearly sixty years filled the double *rôle* of gardener and waiter. He was accustomed to give a glowing description of the gardens about the middle of the eighteenth century, when he entered upon his two-fold office.

In the years 1828, 1829, and 1830 handbills were circulated, setting forth in eulogistic language, the various qualities and virtues the waters were supposed to possess, to which the signature, "A. D. Sinclair, M.D." was affixed; by whom the bills were probably composed. It was apparently found, however, that the mere excellence of the water was not of itself sufficient to "draw" the public; accordingly an extraneous attraction was introduced in the shape of a temporary theatre or circus for the exhibition of equestrian feats, &c., which was erected in 1829, on a part of the grounds, under the management of a Mr. Ryan. In 1833 another attempt at resuscitation was made by the then proprietor, who announced by advertisement that he had "at considerable expense, erected some very

superior accommodation for visitors," &c.—this consisted of a new and larger pump-room, which had been built in 1832, the older one having been pulled down. In the meantime the gardens had suffered considerable curtailment by the formation of St. Chad's Place, and by letting out (1830) a portion of them as a timber-yard.

In September, 1837, the dwelling-house, spring, and garden were put up to auction at Garraway's Coffee House, Change Alley, Cornhill, by their proprietor, a Mr. Salter.[1] The next proprietor, William Lucas, finding that the celebrity of the waters had for a number of years past been confined chiefly to the neighbourhood, issued in 1840 a pamphlet and handbills in which the water was described as perfectly clear when fresh drawn, with a slightly bitter taste.[2]

St. Chad's Well had a longer life than most of the other mineral springs in the vicinity. It never launched out into dissipation; it was thoroughly respectable, if dull. The site is now partly occupied by St. Chad's Place, a small street turning out of the Gray's Inn Road and lying between King's Cross Station of the Metropolitan Underground Railway and the Home and Colonial Schools. The pump-room was still in existence in 1860, but was removed about that time during the operations for the new Metropolitan Railway.

In a collection of views, newspaper cuttings, &c.,

[1] At the time of the sale the garden had been partly built over, a schoolroom and shops occupying a portion of the grounds.

[2] Wroth, "London Pleasure Gardens of the Eighteenth Century," 1896, p. 73.

made by Mr. William Rendle, is a pencil sketch of the old pump-room and house, taken from the gardens: it is undated, but was probably done before 1832. On the same page is a sketch plan of the gardens and buildings, dated 1830. Mr. Clinch, in "Marylebone and St. Pancras" (1890), figures the house as it appeared in the year 1850. The words "ST. CHAD'S WELL" are over the upper windows.

St. Pancras is now one of the most populous parishes in the metropolis, but at the commencement of the reign of George III. open fields, with uninterrupted views of the country beyond, led northwards to it from Bagnigge Wells and St. Chad's. In proof of the rural character of the district at a still earlier period, the words may be quoted of the dramatist Nash, in his greetings to Kempe in the time of Elizabeth: "As many allhailes to thy person as there be haicockes in July at Pancredge." In a subsequent reign the estimable Samuel Pepys made this one of his little Sunday jaunts out of town: "April 23, 1665.—After dinner, Creed and we by Coach took the ayre in the fields beyond St. Pancras, it raining now and then, which it seems is most welcome weather." The old parish church is described by Norden in his "Speculum Britanniæ" (1593), as standing alone and utterly forsaken, "old and wetherbeaten, which for the antiquitie thereof it is thought not to yeeld to Paules in London: about this Church haue bin manie buildings, now decaied, leauing poore Pancras without companie or comfort." It was near this

church, and, according to Roffe[1] (1865), occupying the south side of Church Hill, from its base to its summit, that the Pancras Wells were situated. The most notable feature of this Spa was its garden, which was very extensive, and laid out after the approved style of such places, with long straight walks, shaded by avenues of trees. The garden consisted of the Old Walk and the New Plantation beyond it, both being in rear and south of the wells buildings. There were in addition a separate walk or garden, and a hall, set apart for ladies. An old Indian-ink drawing in the British Museum of the wells, of about 1700, showing the Long Room (60 feet by 18 feet), two Pump Rooms at its west end, and the House of Entertainment (135 feet long), facing the church, with the gardens in the foreground, has been reproduced by Palmer, Clinch, and Walford. In Wroth's "London Pleasure Gardens of the Eighteenth Century" (1896), is a copy of a bill of St. Pancras Wells, showing the wells and the Adam and Eve Tavern, near the church, which is similar to the drawing above mentioned. In connection with the wells was a tavern originally called the "Horns,"[2] and its proprietor, Edward Martin, issued, in 1697, a handbill setting forth the virtues of the waters, which he declared to have been found, "by long experience," a powerful antidote against rising of the vapours, also against

[1] Edwin Roffe's "Perambulating Survey of St. Pancras," 1865, Book III., p. 10.

[2] The Horns Tavern was just below Green Street, a village lying between the foot of West Hill and Kentish Town.

stone and gravel, and as a general and sovereign help to nature.

In 1722 a proprietor of the wells complains that the good name of the place had suffered by "encouraging of scandalous company," and making the Long Room a common dancing-room. He undertakes to put an end to this state of things by excluding undesirable characters from the premises.

An advertisement, dated February 13, 1729, offered "the House commonly called Pancridge Wells, a garden, stable, and other conveniences," to be let. After this Pancras Wells seem to have regained their reputation, advertisements appearing in the London newspapers. One of these in the *Country Journal* or the *Craftsman* for March 7, 1729–30, informs the public that the "Pancras, Bristol, Bath, Pyrmont and Spa waters are for sale at Mr. Richard Bristow's, Goldsmith, near Bride Lane, Fleet Street, those of Pancras at six shillings a dozen, bottles and all." During the next thirty or forty years no particular mention is made of the Wells. But in June, 1769, the proprietor, John Armstrong, advertised the waters as being "in the greatest perfection and highly recommended by the most eminent physicians in the kingdom." It seems that dinners were served, with "neat wines, curious punch, Dorchester, Marlborough, and Ringwood beers," while for those more abstemiously inclined there were syllabubs to be had. In 1779 ladies and gentlemen could enjoy the pleasure of drinking these waters for threepence each morning, or be entitled to drink either the purgative or chalybeate waters at their pleasure, during the whole season, upon subscribing half a guinea. It was said of the

waters that they answered all the ends of the "Holt" waters,[1] with this advantage—that they were very grateful to the taste, strengthening to the stomach, and might be drunk at any season of the year with equal success.

According to Lysons, the Pancras water continued in esteem till some years before 1795, but when he wrote (1795–1811) the well appears to have been enclosed in the garden of a private house, near the churchyard, "neglected and passed out of mind." Part of the site of the old wells and walks was formerly occupied by the houses in Church Row, but these have been swept away for the premises of the Midland Railway connected with the St. Pancras Terminus.

The reaction which set in with the Restoration brought with it a return to the amusements, harmless though some were, but which had been put down by the Puritans with indiscriminating severity.[2] On the site of the present Sadler's Wells Theatre stood one of the music-houses—prototypes of the modern music-hall. It was a single-story wooden building, erected by a Mr. Sadler, a surveyor of the highways, and stood in its own grounds, the New River flowing past its southern side. The digging of gravel for road-making in this part of Islington, or rather Clerkenwell, had given to it the name of Sadler's Hollow, and

[1] Holt, near Rockingham, Leicestershire. "A spring, impregnated with iron and aluminous and calcareous salts, was discovered here in 1728, and called the Nevill-Holt water" (Lewis's Topographical Dictionary, 7th ed., 1848).

[2] An Order of Parliament of 1647 had suppressed "publique play-houses, dancing on the ropes, and bear-baitings."

it retained the name of "The Hollow in the City Road" till about 1803, when it was filled up. In the year 1683, some workmen employed by Sadler, while digging for gravel in his garden, came upon "a broad, flat stone, supported by four oaken posts, and under it a large well of stone arched over and curiously carved." This discovery no doubt gave origin to the tradition that the well had been known many centuries before, and had been accounted a holy well, and used as such by the monks of St. John's Priory. Sadler, suspecting the water to have medicinal properties, had it analysed by an eminent physician in 1684, who advised him to brew beer with it.[1] This he did, with such satisfactory results that the water soon became famous. The "eminent physician" was a Dr. Thomas Guidot, who wrote a pamphlet,[2] under the initials "T. G.," probably a mere puff, extolling the virtues of the water, which he says "has a kind of ferruginous taste, somewhat like Tunbridge, but not altogether so strong of the steel, and having more of a nitrous sulphur flavour about it." This similarity may have led Sadler to bestow the sub-title of New Tunbridge Wells in his prospectus, causing Halliwell-Phillipps and other writers, following Lysons —excepting Pinks—to confound these with Islington Spa, a little further south, although the error had been exposed in the *Gentleman's Magazine* for 1813. The success of the wells excited some jealousy among the proprietors of other Spas, and they had

[1] At Stogumber, in Somersetshire, ale is made from a spring possessed of medicinal virtues, near the village.

[2] "A True and Exact Account of Sadler's Wells, or the New Mineral Waters lately found out at Islington," by T.G., 1684.

not long been opened before there appeared damaging statements in a broadside (1684) against them from their older-established rivals, Tunbridge Wells, and Epsom,[1] also in "A Morning Ramble, or Islington Wells Burlesqt," 1684; and in Nahum Tate's farce "Duke and no Duke," printed in 1685, reference is made to "Sadler's pump."

At the height of its celebrity, when five or six hundred people visited it every morning, the subscription was a guinea the season; to non-subscribers and with capillaire, the water cost sixpence a glass. Dr. Morton, a well-known physician at the end of the seventeenth century, tells how he himself was cured by the Islington (Sadler's Wells) water, which induced him to recommend it. But at this place the wells seem always to have been subordinate to the theatre; they enjoyed a certain meed of popularity, but never reached the fashionable level of Islington Spa. From about 1687 till 1697 the place was comparatively neglected, and the well fell into disuse. In June of the latter year a paragraph appeared in the *Post Boy*: "Sadler's excellent steel waters are now open and current again." How long Sadler remained after his discovery of the wells has never been clearly ascertained, the advertisement only making use of his name. Upon his retirement or death, Francis Forcer, the elder, a song-writer, became lessee of the Musick-house, with one James Miles (about the year 1699), as his partner. To Miles was assigned the control of the good cheer:

[1] The chalybeate wells at Tunbridge were discovered (by Lord North) in 1606, and the sulphate of magnesia wells at Epsom, in 1618.

the playhouse was known as Miles's Musick-house, whilst the waters were still advertised as Sadler's.

A low burlesque poem entitled "The Walk to Islington," by Ned Ward,[1] published in 1699, affords some notion of the performers and amusements here. His description is confirmed by the reminiscences of Edward Macklin, the actor, who remembered the time when the admission was but threepence, except for a few sixpenny places at the sides of the stage, reserved for the "quality." Malcolm, in his "Londinium Redivivum" (1803), notices an application to the House of Commons from a proprietor—probably the younger Forcer—of Sadler's Wells, certifying that it was a place of public entertainment as early as the reign of Elizabeth. Miles died in 1724. Francis Forcer, the younger, notwithstanding his culture, for he was at Oxford and had been called to the Bar (in 1703), celebrated his reign at Sadler's Wells by the introduction of nothing more intellectual than rope-dancing and tumbling. From the *Weekly Journal* of March 15, 1718, some idea may be formed of the audience at that period: "Sadler's Wells being lately opened, there is likely to be a great resort of strolling damsels, half-pay Officers, peripatetic tradesmen, tars, butchers, and others, that are musically inclined." Forcer's application in 1735 for a licence for singing, dancing, and the sale of liquors,

[1] Edward Ward (1667–1731), though of low extraction and little education, was a man of considerable natural parts, and with a gift of humour, and though vulgar and often coarse, his writings throw considerable light on the social life of the time of Queen Anne, and especially on the habits of various classes in London. ("Dictionary of National Biography.")

was refused by the magistrates, but without active interference. It was not until after his death in 1744 that the Grand Jury of Middlesex protested against the demoralising influence of this and similar places of amusement.

In 1746, Rosoman, by trade a builder, whose name survives in that of an adjoining street, was proprietor jointly with Hough—according to Pinks—and did much to revive the fortunes of the place, obtaining a regular licence for the building in 1753. He replaced in 1765 the old theatre, which had previously been of wood, at a cost of above £4,000; his is in part the building of the present day. In a bill of the theatre of 1773, tickets of admission for the boxes are marked 3s., entitling the bearer to a pint of Port, Mountain, Lisbon, or Punch; 1s. 6d. was paid for the pit, 1s. for the gallery, and for an additional 6d. these two classes could have the same liquor as the first. A dialogue in Miss Burney's novel, "Evelina" (1778), proves Sadler's Wells to have been one of the show-places of its time: "Pray, Cousin," said Mr. Branghton, addressing the heroine, "have you been at Sadler's Wells yet?" "No, Sir." "No! why then you've seen nothing!"

There were occasions when personages of high rank attended the performances, among whom the Duke and Duchess of York, the Duke and Duchess of Gloucester, and the Duke of Clarence—afterwards King William IV.—are mentioned. In 1821 the theatre was honoured by the presence of Queen Caroline.

The lonely situation of the theatre and the lawlessness of the times made it necessary to guard

against the unpleasant attentions of footpads. It was customary for people when returning home at night to band themselves together and to employ link-boys to light them to the nearest streets of Islington, Clerkenwell, and Gray's Inn Lane.

Few theatres can show a past of more interest and variety than Sadler's Wells, the oldest minor theatre in London, having been on the same spot and licensed from about 1720. Quite a number of eminent actors and dramatists in their day have appeared upon, and written for, its stage. Amongst the more notable were Charles Dibdin, the elder, and writer of sea-songs (1772), with his sons Charles (1801–14) and Thomas. Under the proprietorship of Thomas King, who succeeded Rosoman after 1771, the entertainments became more thoroughly dramatic. King was the original Sir Peter Teazle in Sheridan's "School for Scandal." He made some changes in the performances, and raised the prices of admission. He sold his share in 1778 and was followed by Richard Wroughton, of Drury Lane, after whom William Siddons (husband of the great tragic actress) became proprietor. The Grimaldis, father and son, also appeared at this theatre, the latter remembered by an older generation as a famous clown, who was, in fact, for some years the life and soul of it. He took his farewell benefit in 1828. In 1804 Sadler's Wells was known as the "Aquatic Theatre"; a large tank, filled with water from the New River, occupied nearly the whole of the stage, and plays were produced with "real water" effects. But it was Samuel Phelps who, in conjunction with Mrs. Warner and Thomas Greenwood, was so

successful in filling this little temple of the drama, and in making Shakespeare pay for nearly twenty years, from 1844 to his last season, 1861–62, producing during that time some thirty of the plays —"Hamlet" being performed four hundred times. Having been closed for some years, the whole interior of the theatre was reconstructed and opened by Mrs. Bateman in 1879. Of late years Sadler's Wells has become a home of burlesque and modern comedy. It is now a music-hall, and the bills announcing that the seats range in price from 2d. to 1s. for a box, proclaim the standing of the house. The name by which it is still known—"Old Sads" —is singularly appropriate in its now fallen condition.

As regards the position of the well, Malcolm (1803–07) says—but the fact is not elsewhere authenticated—that it "was accidentally rediscovered some time since between the New River and the stage door, and is said to have been encircled with stone, with a descent of several steps." Wilkinson, writing about the year 1825, says: "Nearly in the centre of the coach-yard is a well of mineral water, covered by a brick arch." Cromwell, a few years later, states: "It is known that springs exist under the orchestra and stage, and it seems probable that the ancient healing fountain might be traced to that situation."

Rosebery Avenue, opened in 1892, strikes through this district in a north-easterly direction, passing between the theatre and the Islington Spa house. In the formation of this road, an interesting tavern, the "Sir Hugh Myddelton," erected in 1831, was demolished. It stood on the side of the New River

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SOUTH WEST VIEW OF
SADLER'S WELLS.
R. C. Andrews, 1792.
by Robert Wilkinson, N.º 58 Cornhill.

opposite to Sadler's Wells Theatre, once fringed by a row of lofty poplars, on the site of the "Myddelton's Head," built as early as 1614. Here was the meeting-place of a club of actors founded by Rosoman in 1753, and in the bar was to be seen a painting introducing portraits of himself and of some of the actors and frequenters of the theatre; their names are given in Pinks' "History of Clerkenwell."

There is an abundance of views of Sadler's Wells, especially of the eighteenth century. Hogarth's "Evening," one of four pictures called "Four Times of the Day," published in 1738, shows a corner of the Sir Hugh Myddelton Tavern, with projecting sign-board, and a part of a building with the words, "Sadler's Wells" over the door, but there is a want of topographical accuracy in the picture, which seems only intended to convey some idea of the locality of the supposed scene. Pinks has a north view of Sadler's Wells in 1720, and Wilkinson's "Londina Illustrata" contains an engraving from a drawing by R. C. Andrews of the south-west side, 1792, with a smaller view of the same as it was before 1765. Many others may be seen in the Percival collection relating to Sadler's Wells in the British Museum, and in the Crace collection, in which there is a view of the Music House as it appeared in 1728 (Bickham, sculp.), and another in 1731.

Islington is described by a French traveller as "a large village, half a League from London, where you drink waters that do you neither Good nor Harm, provided you don't take too much of them. There is Gaming, Walking, Dancing; and a Man may spend

an Hour there agreeably enough. It is not much flock'd to by People of Quality." [1]

Islington, like many other place-names, has passed through a variety of forms. It seems to be a vernacular corruption of Yseldon. Some have referred the etymology to Isendune, Hill of Iron (*isen*, A.S. for iron; and *dun*, a hill fort), because it is written Isendune, as well as Iseldone,[2] in Domesday Book, and particularly because sulphuret of iron has been discovered in the district, besides chalybeate springs. The discovery of one of these on a spot to the south-east of the New River Head, dates from, or shortly before, the year 1684, when a rhyming advertisement appeared referring to "the sweet gardens and arbours of pleasure" at what afterwards became a fashionable lounge. It is not known precisely at what date the chalybeate spring was first opened to the public, but as early as 1685 it was evidently well known, the following curious announcement appearing in the *London Gazette* of the 24th of September in that year, commencing: "Whereas Mr. John Langley, of London, Merchant, bought the Rhinoceros and Islington Wells," &c.—an odd combination of purchases! An early visitor of note here was Evelyn, who has the following entry in his Diary under June 11, 1686: "I went to see Middelton's

[1] "Memoirs and Observations in his Travels over England," by M. Misson, 1719, p. 161; originally published in French in 1698. (British Museum.)

[2] In an ancient deed—8th Henry VI. (1430), the spelling is Iseldon, and in the poem of the "Turnament of Totenham," a burlesque on the parade and fopperies of chivalry, written probably in 1456, it is spelt Hyssylton.

receptacle of water at the New River, and the new Spa Wells neare." It is possible that Sadler's Wells is meant, as the two were within a stone's throw of each other, and were opened almost simultaneously. The original name was Islington Wells, but it soon acquired the secondary title of New Tunbridge Wells, by which it was generally known until about 1754, when the name of Islington Spa came into use. It has furnished the subject of numerous poems, plays, songs, and satires. One of the last, entitled, "Islington Wells or the Threepenny Academy," 1691, shows in a few lines the real purpose of some of the visitors in frequenting the place.

> "Of either sex whole droves together,
> To see and to be seen flocked thither,
> To drink—and not to drink the water,
> And here promiscuously to chatter."

Contemporary writers describe the curiously assorted company frequenting the gardens, which from about 1690 to 1700 were much visited. A few valetudinarians might be found as early as seven o'clock in the morning, but most of the visitors did not come till some hours later, when the gardens would be filled with a gay and sometimes brilliant concourse, but of that mixed character commonly met with at these London resorts. Rank and fashion rubbed shoulders with those who could only ape their dress and manners: the modish spark strutted on the walks, his long sword decked with ribbons of scarlet or blue, and ladies redolent with powder of orange or jessamine, talked scandal and discussed the latest

fashions.[1] The gardens, which covered a large extent of ground exceeding those of Sadler's Wells on the opposite side of the New River, were planted with limes and provided with arbours for such as preferred seclusion. In addition to the coffee-room (40 feet long) there was a dancing-room, and the inevitable raffling shop and card-room for the gamblers and their dupes. The charge for drinking the water was threepence, and the garden was open on two or three days in the week from April or May till August. A ticket costing 1s. 6d. gave admission to the public breakfasting, and to the dancing from eleven to three.

In the early part of the eighteenth century the Spa seems to have gone temporarily out of fashion, and in 1714 "The Field Spy" speaks of its forlorn appearance :—

> "The ancient drooping trees unprun'd appear'd ;
> No ladies to be seen ; no fiddles heard."

In the year 1733 a distinct revival took place, when in the months of May and June the Spa was visited regularly by the Princesses Amelia and Caroline, daughters of George II., to drink the waters. On some of these occasions a royal salute of twenty-one guns was fired, and the presence of royalty naturally attracted a great concourse of people to the gardens,

[1] Of the characters singled out by Ward in his poem entitled, "A Walk to Islington, with a Description of the New Tunbridge Welles, Sadler's Music House, &c.," 1699, that of the Beau is a clever piece of verbal portraiture, but too long for quotation.

The original engraving is by G. Bickham, jun., 1733.

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the proprietor taking on one morning £30, and sixteen hundred people are said to have been present.[1] New Tunbridge Wells, for a time at least, became again the vogue. The following extract from Mrs. Delany's reminiscences, which refers to the year before the royal visits, tends to confirm this: August 7, 1732. "Poor Lady Sunderland goes constantly to Islington Wells, where she meets abundance of good company. These waters are rising in fame, and already pretend to vie with Tunbridge. If they are so good it will be very convenient to all Londoners to have a remedy so near at hand." Among other distinguished visitors was Beau Nash.

The managers at this time appear to have conducted the place with due propriety. In order to preserve a proper decorum, no person of exceptionable character was to be admitted to the ballroom, nor were any dancers allowed to appear in masks.

From about 1750 to 1770 the Spa was a good deal frequented by water-drinkers and visitors, who could get pleasant and commodious lodgings at the Wells. Dr. Russel, who analysed the water, said that it had a taste of iron, and, unless mixed with ordinary water, was apt to make the drinkers giddy and sleepy. This was the experience of Lady Mary Wortley Montagu, who takes credit for having introduced these waters to the *beau monde*. The letter of a young lady, writing from London to her friends in June, 1753, contains the following reference to the wells: "Yesterday I went with Miss —— to y^e^ New Tunbridge Wells, and

[1] The visits of the Princesses are alluded to in a lyric poem entitled, "The Humours of New Tunbridge Wells at Islington," London, 1734.

think it is a very pretty Romantick place and the water very much like Bath water, but makes one vastly cold and Hungary" (*sic*).[1]

In 1770 the Spa was taken by Mr. John Holland, and from that time the place was popular as an afternoon tea-garden. In 1778 Holland, having become bankrupt, was succeeded by a Mr. John Howard, who added a bowling-green, and introduced astronomical lectures, and other attractions.

The gardens themselves would seem to have been kept up till the beginning of the last century. The author of "Londinium Redivivum," writing about 1803, speaks of them as being "really beautiful; pedestals and vases are grouped with taste under some extremely picturesque trees, whose foliage is seen to much advantage from the neighbouring fields."[2]

About 1810 Howard found that, in spite of all his efforts, the popularity of the gardens waned: they were now reduced in size by the formation of Charlotte Street (now Thomas Street). A later proprietor, named Hardy, opened the gardens in 1826, as a Spa only. Two years later they were still open, and were visited by Mr. Thomas Coull, the author of the "History and Traditions of Islington" (1865), who viewed the spring and drank the water which "had a slight saline taste and a whitish hue." The yield was then only about two pailfuls per day.

The remorseless hand of the builder had been laid upon the spot. The last of the coffee-house was

[1] Extract from family correspondence communicated by C.L.S. to *Notes and Queries*, 8th ser., vi., 1894, p. 69.

[2] Malcolm, "Londinium Redivivum," iii. pp. 230, 231.

demolished in 1840, and the two rows of small houses, called Spa Cottages, were built upon the site of the gardens, and are still standing. But the old well was there, enclosed, as formerly, by grotto work. From about 1840–42 a surgeon named Molloy resided in the proprietor's house, No. 6, Lloyd's Row, where a new entrance, facing the New River Head, was removed for the building of Eliza Place. Molloy dispensed the water to invalids for an annual subscription of one guinea, or for sixpence each visit. He preserved the well in an outbuilding attached to the east side of his house. The water was not advertised after his tenancy, though it continued to flow as late as 1860.

Mr. Philip Norman has put upon record a visit he paid to the place in 1894,[1] when he found what remained of the well in some grotto work, with stone pilasters, and on each side steps descending. In the autumn of the same year Mr. Warwick Wroth and his brother, Mr. A. E. Wroth (joint authors of "The London Pleasure Gardens of the Eighteenth Century") visited the house and found the outbuilding occupied as a dwelling-room of a very humble description, with the grotto that had once adorned the well. The writer of these pages was there twelve years later—August 5, 1906—and was shown by the occupier of the outbuilding forming the back of No. 6, Lloyd's Row—a labourer—the small room, triangular in shape and only slightly below the level of the living-room out of which it led, still containing the grotto work, the well being under the flooring and long since filled up.

[1] *Notes and Queries*, 8th ser., vi., 1894, p. 457.

The formation of Rosebery Avenue, by which many old landmarks have been swept away, necessitated the removal of Eliza Place, and the two northernmost of the three little public gardens, opened by the London County Council on July 31, 1895, as Spa Green, are now on part of the site of the old Spa. Under the coping of the proprietor's house may still be seen the inscription :—

"ISLINGTON SPA, OR NEW TUNBRIDGE WELLS."

Near the angle formed by Rosoman and Exmouth Streets, Clerkenwell, was a plot of land called Spa Fields, but earlier known as Ducking Pond Fields ; [1] hunting ducks with spaniels being one of the cruel pastimes to which our forefathers were addicted. At the north corner of this open space stood, in the seventeenth century, an inn called the "Fountain" —a favourite sign with Londoners before the Reformation. About the year 1685 a spring of "excellent tonic water" was discovered on the premises, which the proprietor at that time, John Halhed, vintner, held out as a special inducement to draw customers to his house. The inn now took the name of the "London Spaw," in lieu of the "Fountain," its inauguration taking place on July 14, 1685, by Robert Boyle, in the presence of "an eminent, knowing, and more than ordinary ingenious apothecary . . .

[1] There are old prints representing these ducking sports. Pepys, in his Diary, March 27, 1664, says : "I walked through the Ducking-pond Fields, but they are so altered since my father used to carry us to Islington to the old man's at the King's Head, to eat cakes and ale, that I did not know where was the ducking-pond, nor where I was."

ISLINGTON SPA; OR NEW TUNBRIDGE WELLS.

The proprietor's house in 1907.

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besides the said John Halhed and other sufficient men." It had a front towards Spa Fields, forming the corner house of Rosoman's Row; the site of the building was about Nos. 4 and 5 of the street now called by his name. The waters were supplied to the poor gratis, but to what extent they were imbibed by those who had to pay for them there is no information to show. The following verse from Poor Robin's Almanack for 1733 shows that a stronger beverage was at least in equal demand:—

> "Now sweethearts with their sweethearts go
> To Islington, or London Spaw;
> Some go but just to drink the water,
> Some for the ale which they like better."

In the year 1754 the proprietor, George Dodswell, informed the public by advertisement that "at the London Spa, during the time of the Welsh Fair, held in the Spa Field, will be the usual entertainment of roast pork, with the oft-famed flavoured Spaw Ale," and in addition he promised his customers that they would receive the most inviting usage at his hands. The Spaw[1] ale appears to have been of such excellent quality that it eclipsed the fame of the mineral water. Perhaps it was for this reason that the "London Spa" henceforth was merely frequented as a tavern.

Cromwell (1828) says the spring "is now lost, though water from it was obtainable about eighteen years since (1810) by means of a pump remaining

[1] It seems that in those days they pronounced Spa as Spaw, according to the spelling in Johnson's dictionary.

in the cellar of the house in question," (*i.e.*, the public-house). The "London Spa" has had two successors, bearing the like sign; one built in 1835 and pulled down in 1897, and finally the present public-house, which fills the same corner site as its namesakes did.

Mr. Wroth mentions a rare bronze ticket of oblong form, incised with the words "London Spaw, No. 19," in the possession of Mr. W. T. Ready, the London coin dealer. He adds that it may belong to the middle of the eighteenth century.[1]

An engraving of the Spa garden, forming the frontispiece to a poem called "May Day, or the Origin of Garlands," published in 1721, is reproduced in Wroth's "London Pleasure Gardens." Milkmaids and their swains are here seen dancing to the music of the fiddler on a May Day in 1720. On the right of the picture is part of a building and at the back rows of trees receding in perspective.

In Pinks' "History of Clerkenwell" there is a general view of the "London Spa" dated 1731, consisting of an irregular group of buildings standing alone. In front of the houses is a sunken road, and a clump of trees behind the houses, which probably stand in the gardens. Within a hundred yards or so of the "London Spa" public-house, on a site now filled up by houses in Lower Rosoman Street, Clerkenwell, stood a popular place of amusement advertised as "The New Wells." Like the Islington Spa gardens, they commanded an open prospect of the fields and country beyond, but little is recorded of the mineral

[1] "London Pleasure Gardens of the Eighteenth Century," 1896.

waters, except that they were used to make ale with. A theatre was built in the gardens for dramatic and other performances, the most popular artists of the day being engaged; the diversions, as they were called, included rope-dancing, singing, and tumbling. The entertainments usually began at five o'clock, and concluded with a farce or a pantomime. Like other gardens, those of the New Wells were open on Sunday evenings, and home-brewed ale and porter were retailed to the thirsty citizens. Among the miscellaneous attractions here was a kind of Zoological Gardens, containing rattlesnakes, flying squirrels, and a crocodile imported from Georgia. In 1740 a Merlin's Cave was added, probably in imitation of the Richmond Cave, described by Walford in "Greater London." During the season of the same year (1740), the grand *dénouement* was a scenic representation of the siege of Portobello by Admiral Vernon. Among others who acted here was Rosoman, the well-known proprietor of Sadler's Wells, when in June, 1744, there was a pantomime in which he sustained the part of Harlequin, in "The Sorceress, or Harlequin Savoyard." The *Daily Advertiser* of June 27, 1744, says that to see this new entertainment there was a crowded and polite audience, and that on one night it was performed to upwards of seven hundred people. A more ambitious project was the representation which was given in 1746 of the battle of Culloden and the storming of Culloden House. The partisans of the reigning monarch displayed their approval of the piece by a too vigorous application of their canes upon the benches, drawing forth a remonstrance from the manager, at

that time Mr. Yeates (or Yates), who regretted the damage done to them, while acknowledging his gratification at the applause manifested.

About this period Mrs. Charlotte Charke (the youngest daughter of Colley Cibber, the dramatist), appeared at the wells as Mercury in the play of "Jupiter and Alcymena." The season of 1750 appears to have been the last at the New Wells, as advertisements of them ceased to appear in the public prints from this time; two years later (1752) the proprietor, Yeates, let the theatre to the Rev. John Wesley, and in May of that year it was converted into a Methodist tabernacle. A few years afterwards the theatre was pulled down, probably in 1756, when Rosoman Row was built.

Unlike its near neighbour Islington, Clerkenwell[1] is not mentioned in Domesday Book. The great Priory of St. John of Jerusalem, founded near the end of the twelfth century, and other scarcely less important religious houses, formed the nucleus around which this suburb gradually grew, but even when Stow wrote his "Survey," towards the end of the sixteenth century, there was much open country on all sides. He speaks of "the many faire houses for gentlemen and others, now built about this Priory, especially by the highway towards Islington," adding that "the fields here were commodious for the citizens to walk about and otherwise recruit their dulled spirits in the sweet and wholesome ayre."

The earliest notice extant of Clerks' Well is to

[1] It may be hardly necessary to remind the reader that the plural endings to some few nouns in Anglo-Saxon were *an* or *en*, hence Clerken Well means the Clerks' Well.

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be found in FitzStephen's Chronicle (*circa* 1180–82), in which he alludes to the springs on the northern side of London. Both Clerks' Well and Skinners' Well, which lay near it, have a special interest and importance in connection with the forerunners of the English drama, the so-called "Miracles"—Miracle or Mystery plays—which had superseded the profane Mummeries, remnants of paganism.

It will be of interest to outline very briefly their character and development, and in so doing making use chiefly of the concise survey of the subject in "The Tutorial History of English Literature," by Mr. A. J. Wyatt (1907).

The material of the Mysteries was usually taken from Biblical subjects, and the Miracles consisted of the legends of saints, in whose honour they were acted. The earliest Miracles probably date from the close of the eleventh century, but none have survived of earlier date than the twelfth, and none entirely in the vernacular earlier than the thirteenth. By degrees the scene passed from the church to the public place or street; the action developed; and the actors were priests supported by lay-folk, or were lay-folk alone. The dialogue in these plays was generally set in rhyming stanzas, which were probably delivered in a kind of monotone, and this would account for the parish clerks being employed as actors; their familiarity with sacred subjects and their proficiency in chanting recitative specially fitting them to take part in such performances.

When the Miracles fell into lay hands alone they increased in popular favour, and the festival of Corpus Christi, which usually fell in June, from being a holy

day, became a holiday devoted to the enactment of Miracles by the various trade guilds. The Christmas and Easter scenes, which had originally been the nucleus of the whole, were expanded until a complete cycle of plays was formed, starting from the Creation and Fall of Man, embracing certain Old Testament episodes bearing upon the Gospel narrative, and rounding off the whole with the Judgment. Four such cycles have come down to us, called respectively the York, Wakefield, Chester, and Coventry plays.

The York cycle, numbering forty-eight plays, dates from the middle of the fourteenth century. In the Wakefield cycle comic relief was sometimes given. The Miracle cycles continued to be played till the close of the sixteenth century.

The collection known as the Chester Mysteries was acted in that city in the year 1327, and contains "The Fall of Lucifer," acted by the Tanners; "The Creation," by the Drapers; "The Last Supper," by the Bakers; "The Resurrection," by the Skinners, &c.

The Coventry cycle contains allegorical personages which represent a partial transition to the next stage in the development of the drama, the Morality play, dating from the fifteenth century, in which the characters were abstractions or allegorical representations of virtues, vices, mental faculties, &c., such as Charity, Sin, Death, Hope, Faith, or the like. Comic relief was sometimes provided in the Moralities by means of an Interlude, which was often acted by household servants or retainers.

Stow makes quaint allusion to the time-honoured custom of dramatic representations of sacred subjects: "The Parish Clarkes in London of old time were

accustomed yearely to assemble, and to play some large historie of Holy Scripture." He says that the Skinners' Well was so called "for that the Skinners of London[1] held there certain plays yearly played of Holy Scripture." It was here that in 1390 the clerks performed for three days representations of the "Passion of Our Lord and of the Creation of the World" before King Richard II., his Queen and Court. In 1409, the tenth of Henry IV., there was another great performance which lasted eight days, and "was of matter from the Creation of the World; there were to see the same, the most part of the nobles and gentles of England" (Stow).

William Hone, writing of the Miracle Plays of the Middle Ages (1823)[2] points out that the configuration of the ground was very favourable for viewing the performances at the wells, as there was a rapid slope from Clerkenwell Green down to the valley of the Fleet, forming a sort of natural amphitheatre, whence the spectators could see distinctly all that went on below them.

The site of Clerks' Well is known. Stow says it was "not far from the west end of Clerkenwell (parish) Church, but close without the wall that incloseth it." In his day some care was evidently taken to preserve its waters from the contamination of surface drainage. This can be realised by reference to Agas's pictorial plan of London, in which

[1] The Skinners were incorporated in the first year of Edward III. (1327), and formed a brotherhood in the eighteenth of Richard II. (1395). There does not seem to be any authority for the statement that the Skinners held plays.

[2] "Ancient Mysteries described," &c., pp. 206, 207.

the water is represented gushing from a spout at the south-west corner of St. Mary's Nunnery, and falling into a trough, enclosed by a low wall—doubtless the curbing stone to which Stow refers.

One of the earliest events in the modern history of the Clerks' Well is the donation in 1673 of the spring and the plot of ground on which it was situated, by James, third Earl of Northampton—whose family, the Comptons, occupied the old manor-house of Clerkenwell till nearly the end of the seventeenth century—for the use of the poor of the parish of St. James. The Vestry, however, thought fit to lease the spring "for the benefit of the poor" to a brewer—John Crosse. In regard to this transaction Strype says (1720): "One Mr. Crosse, a brewer, hath this well enclosed, but the water runs from him by means of a conduit into the said place (*i.e.*, in a lane leading from Clerkenwell to Hockley-in-the-Hole).[1] It is enclosed with a high wall, which formerly was built to bound Clerkenwell Close; the present well being also enclosed by another lower wall from the street. The way to it is through a little house which was the watch-house; you go down a good many steps to it. The well had formerly iron-work and brass cocks, which are now cut off. The water spins through the old wall. I was there and tasted the water and found it excellently clear, sweet, and well tasted."[2]

Wilkinson has an illustration of the pump in

[1] An infamous locality in the eighteenth century; the haunt of thieves, highwaymen, bull-baiters, and backsword players.

[2] The Clerks' Well was fifty years ago (about 1858) still marked by the pump.

"Londina Illustrata" (1825), as erected by the parishioners in 1800, near the south-east corner of Ray Street, the spring from which it was supplied being 4 feet eastwards. An iron tablet was fixed over the pump in the latter year to commemorate the performances of the parish clerks of London "in remote ages," and calling attention to the fact that "the water was greatly esteemed by the prior and brethren of the Order of St. John of Jerusalem, and the Benedictine Nuns in the neighbourhood." The Order was founded towards the end of the twelfth century, and it is somewhat remarkable that the well survived down to the end of the nineteenth century, or rather more than seven hundred years.

Mr. John Ashton, in his entertaining book on the Fleet,[1] says, with reference to the Clerks' Well: "The well, alas, is no more—but when I say that, I mean that it is no longer available to the public. That it does exist, is well known to the occupier of the house where it formerly was in use, for the basement has frequently to be pumped dry." More recently Mr. Philip Norman records the fact of its existence in his book on "London Signs and Inscriptions" (1897) in these words: "The well still exists, covered by a massive brick arch, under the floor of No. 18, Farringdon Road—formerly the parish watch-house. This quaint little tenement is now to be let on building lease."

Stow's authority, we are informed by Mr. Kingsford (vol. ii., Notes, p. 272), for the history of the Clerkenwell group of wells is the Cartulary of the Priory of the Nuns of Clerkenwell (Cotton MS. Faustina,

[1] "The Fleet: its River, Prison, and Marriages," 1888, p. 183.

B XI.). The most important document is one dated 1197, relating to the donations of Lecia de Montigny, widow of Henry Foliot, and daughter of John Briset, the founder; this is printed by Dugdale (No. xv. in "Mon. Angl.," iv. 83), and Feet of Fines, 7 and 8 Ric. I., No. 136, Pipe Roll Soc. 20. Skinners' Well is there described as lying in the valley between the Nun's Priory and the Holeburn, in which was a large fish-pond. The same document also mentions Faggeswell—"near unto Smithfield by Charterhouse, lately dammed up" (Stow). In 1197 certain lands are described as lying between the garden of the Hospitallers and Smithfield Bar "super rivulum de Fackeswell," and other lands as between that brook and "Chikennelane" (Feet of Fines, *ut supra*). This fixes the position of Faggeswell Brook as approximately at the boundary of the City. The Todwell[1] of Stow is a misreading by him of Cotton MS. Faustina, B XI., f. 27, where certain land is described as "inter Skinners' well et Godewelle, subtus viam usque in Holeburn." In Feet of Fines (*u.s.*) Godewell is described as between the Priory and the Holeburne; apparently somewhat to the south and on the far side of the valley. The original Charter of Incorporation was, as already stated, granted to the Skinners in the first year of King Edward III. (1327), but for the well to have been named after them, they must have existed as a guild or society many years before the granting of their first charter.

Strype, in his continuation of Stow's "Survey"[2]

[1] Reading from manuscript, the letters "T" and "G" would be easily confounded.

[2] Vol. ii., Book iv., chap. iii. p. 69.

(1720), says: "Skinners' Well is almost quite lost, and so it was in Stow's time. But I am certainly informed by a knowing parishioner that it lies to the west of the church (of St. James, Clerkenwell), enclosed within certain houses there." The parish would fain recover the well again, but cannot tell where the pipes lie. But Dr. Rogers, who formerly lived in an house there, showed Mr. Edmund Howard, late churchwarden, marks in a wall in the close where, as he affirmed, the pipes lay, that it might be known after his death."

The exact site of Skinners' Well is not now known.

As to Loder's Well; about the year 1200 Muriel de Montigny gave the "fons qui vocatur Lodderswell" to the Nuns of Clerkenwell, with a right-of-way thereto from the Priory (Cartulary, f. 32 vo.).

What little information there is about Radwell comes from the same source, "terram quam Osbertus tenuit in Redwell" (Cartulary ff. 6, 39). The reference, Mr. Kingsford remarks in his edition of Stow, is apparently to Radwell, in Hertfordshire. Its synonyms were Rode Well and Rede Well.

In Stow's time all these wells, excepting Clerks' Well, and Skinners' Well were "decayed and so filled up that their places are hardly now discerned."

Crowder's Well is described by Childrey ("Britannia Baconica," 1661) as at the back side of St. Giles by Cripplegate, and as having "a very pleasant taste like that of new milk, and very good for sore eyes."

There was also Monk Well, now remembered in Monkwell Street. The origin will be found by dipping for a moment into mediæval history. By indenture dated on the Nativity (1347) the Lady

Mary de St. Pol, Countess of Pembroke, granted to the Abbot and Convent of the Cistercian Abbey of Garendon, in Leicestershire, two tenements which she possessed, one in Fleet Street, the other in Sherebourne Lane. In return for these the Abbot and Convent were to maintain one monk in a hermitage near Cripplegate, to pray for the soul of Aymer de Valence, late Earl of Pembroke, &c.[1]

A little to the west is Well Street, for there was also a St. Giles's Well.

In the early part of the nineteenth century the district about Tabernacle and Paul Streets was known as St. Agnes le Clear, from a celebrated well or pool of that name near Old Street. The well and district have been variously called Dame Annis the Clear (Stow), Anniseed Clear (Defoe), and Agnes le Clair. The streets at present comprising the district are almost entirely given up to business houses, warehouses, manufacturing houses, and offices. In a survey of 1567, Bonhill (or Bunhill), one of the three great fields of the Manor of Finsbury, is described as abutting on Chiswell Street on the south, and on the north on the "highway that leadeth from Wenlock's burn to the well called Dame Agnes the Cleere." Maitland, in his "History of London" (edition 1756), alludes to St. Agnes le Clair as the "celebrated spring at the entrance to the small village of Hoxton." To be more exact, it lay at the Old Street end of Paul Street, the northern extremity of Wilson Street, Finsbury Square. It was anciently in great esteem from the plentiful supply and sweet-

[1] "Monasticon Anglicanum," Dugdale, v. 328–330.

ness of its water. In Henry VIII.'s reign, when the fervour of the Reformation was just setting in, the prefix "Saint" was dropped, and the spring was rechristened "Dame Agnes à Clère." The following curious dialogue between a country gentleman and a citizen occurs in "The Pleasant Walks of Moore Fields" (1607), placing the existence of the spring as far back as the thirteenth or fourteenth century, and Stow gives this as the legend from which the name arose :—

"COUNTRY GENT. But, Sir, here are stones set upright; what is the meaning of them?

CITIZEN. Marry! where they stand runs a Spring called Dame Annis le Cleare, after the name of a rich London Widow, Annis Clare, who, matching herself with a riotous Courtier in the time of Edward I., he vainly consumed all her wealth: there she drowned herself, being then but a shallow ditch or running water."

Ben Jonson's Comedy of "Bartholomew Fair"[1] contains a reference to this spring. In Act iii., Scene 1, one of the characters, Captain Whit, delivers himself thus: "A delicate show-pig, little mistress, with shweet sauce, and crackling, like de bay-leaf i' de fire, la! tou shalt ha' de clean side o' de table-clot, and di glass vashed with phatersh (waters) of Dame Annesh Cleare."

Among the surveys taken by the Parliament in 1650, the well is stated to have lain upon waste lands "late belonging to 'Charles Stuart,' sometime King of England"—in other words, Crown lands—and was environed with a brick wall. The well was 18 feet deep, and the waters were said to be valuable in

[1] "Bartholomew Fair" was produced at the Hope Theatre on the Bank-side (Southwark), October 31, 1614.

rheumatic and nervous cases. In digging the foundations for repairs towards the end of the eighteenth century, many ancient copper coins, lachrymatories [1] (tear bottles), and other antiquities were discovered—probably votive offerings made in earlier times to the guardian spirit of the well.

During the eighteenth century advertisements appeared at intervals calling attention to the virtues of the mineral spring, and of the baths, which were opened apparently in 1731, as some time in that year notice was given—"That there is now opened at St. Agnes le Clear, near Hoxton, not far from Moorfields, the place formerly distinguished by the sign of the 'Sun and Pool of Bethesda,' A NEW COLD BATH, larger and more commodious than any in or about London, being 30 feet long, 20 feet broad, and 4 feet 6 inches deep, the water continually running; where ladies and gentlemen may depend upon suitable accommodation and attendance." Then follows a long catalogue of diseases, all of which were curable by drinking the waters: for cutaneous eruptions and for inflammation and weakness of the eyes they were doubtless efficacious.

In 1748 the proprietor of the Baths, a Mr. Payne, complains through the newspapers of the robbery from his garden of shells out of the rock-work, of artificial fruit-trees, and of two swans made of glass, taken out of the basin of the fountain. A guinea was offered for the discovery of the person or persons

[1] Their real use was to hold perfumes or ointments. Many of these little vessels have been found in London associated with other relics of the Roman occupation, examples of which may be seen in the Guildhall Museum.

concerned in the theft. Other advertisements are preserved in the Rendle Collection; one of these, from a newspaper of 1756, speaks of the place as "the original Cold Bath at St. Agnes le Clair, a spring much applauded by the learned physicians of old, and now greatly extolled by the most eminent professors of this age," &c. In another of January 27, 1778, the Baths are advertised as "Rebuilt and generally allowed to be the completest Ladies' and Gentlemen's Cold Baths in or about London.

A handbill of June 19, 1834, is headed by an engraving of the front elevation of the Baths, having over the windows the inscription "St. Agnes le Clair Mineral Baths." The house consisted of not less than twelve or fourteen rooms. The spring flowed constantly at the rate of 10,000 gallons every twenty-four hours, and remained at the same temperature at all seasons of the year. The terms of subscription at this time were: For cold baths per annum, £1 5s.; a single bath was 1s.; warm and vapour baths could also be had at 2s. 6d. and 5s. each bath respectively.

On November 16, 1845, a destructive fire occurred in which nearly the whole of the front dwelling-house was consumed, as well as its contents, besides damage being done to the baths at the back. The premises were then tenanted by a Mrs. R. M. Moore. A memorandum on the same page from which the above particulars are taken, states that "the site of St. Agnes Le Clair Baths has not been restored to its original use; it is now occupied by two shops—the well is still running, the water being used in a drug mill." This was written in 1852. Till within recent

times the portion of Old Street between the City Road and Hoxton was called St. Agnes le Clare Street, and there is still in the neighbourhood a St. Agnes Terrace.

"Not far from Dame Annis the Clear," says Stow, "is also one other clear water called Perilous Pond, because divers youths by swimming therein have been drowned." Its position was immediately behind St. Luke's Hospital, in Old Street. The pond or pool was filled by one of the ancient springs which overflowed and supplied that part of London with water at a time when the citizens conveyed their water by wooden pipe conduits. Early in the seventeenth century it was apparently resorted to for the amusement of duck-hunting: "Let your boy lead his water-spaniel along, and we'll show you the bravest sport at Parlous [1] Pond." [2]

The place having been closed for some years on account of the danger to bathers, it was reopened in the year 1743 by William Kemp, "an eminent citizen and jeweller," who discarded the unlucky word "Perilous" for "Peerless." The open-air bath constructed by him was 170 feet long by 100 feet wide, and nowhere deeper than 5 feet, "where persons could enjoy the useful and manly exercise of swimming with perfect safety." Advertisements of the eulogistic order appeared in the newspapers of 1748,[3] describing the baths as "truly Peerless, having

[1] The old pronunciation of "perilous."

[2] Middleton's "Roaring Girl," 1611, Act ii. Sc. 1.; named from Moll Cutpurse, one of the characters.

[3] The *Daily Advertiser* of August 6, 1748, printed a long poetical description of Peerless Pool (Maitland),

no equal." Besides the bath, Kemp also constructed a large fish-pond, 320 feet long, 90 feet broad, and 11 feet deep, and stocked with carp, tench, and other fish. Writing of the locality in 1790, Pennant says: "Here is an excellent covered bath, a library, a bowling green, and every innocent and rational amusement." On leaving the baths visitors would adjourn to the "Shepherd and Shepherdess," a neighbouring inn, to tea.

About 1805 Mr. Joseph Watts (father of Thomas Watts, the Keeper of the Printed Books at the British Museum), obtained a lease of the place from St. Bartholomew's Hospital at a rental of £600 per annum. He drained the fish-pond and built Baldwin Street over the site, pulling down the old-fashioned house which Kemp had inhabited, and erecting Bath Buildings on his orchard: these buildings do not appear to have been completed till about 1811 or later. The bath he preserved intact.[1] Hone in 1826, when Watts was still proprietor, describes how the Bluecoat boys enjoyed their plunge in the pool, which was in fact used by them for nearly a quarter of a century later. Peerless Pool is named in "The Picture of London" (1829), as one of the principal public baths of London. On June 24, 1833, an historical drama was performed at Sadler's Wells Theatre, entitled "Peerless Pool, or the early days of Richard III." Mr. Hyde Clark, writing in *Notes and Queries* in 1889,[2] says that it continued to be used as a bath until comparatively late years.

[1] Wroth, "London Pleasure Gardens of the Eighteenth Century," p. 84, and Hughson, vol. iv. p. 414, ed. 1811.

[2] *Notes and Queries*, 7th Ser., viii. 214, 215.

It seems to have been built over between 1850 and 1860. North of St. Luke's Hospital is Peerless Street, formerly called Peerless Row, and on the west side, Bath Street—a nomenclature which keeps in memory the old association of the district.

CHAPTER V

NORTH AND EAST LONDON GROUP OF WELLS AND SPAS

Holywell, Shoreditch—Conventual House of St. John the Baptist at Haliwell—Position of the well discussed—Hoxton "Balsamic Wells"—Dr. Byfield's account of them in 1687—Shadwell—Sun Tavern Fields: Mineral spring—Postern Waters, Tower Hill—Hackney—Its wells and springs—Pig or Pyke Well—Churchfield Well—Shacklewell—Wells at Tottenham—Offertory or Cell of St. Eloy—Hermitage and Chapel of St. Anne—Bishop's Well—Well in Spotton's Wood—St. Dunstan's Well—Bruce Castle—Woodford Wells; a mineral spring near the "Horse and Groom"—Chigwell—Derivation of the name—Purgative spring in Chigwell Row—Muswell Hill—Two ancient wells, differing in quality.

EARLY in the twelfth century—the date is unascertainable—there is known to have been a well or spring of water situated on the eastern extremity of Finsbury Fields, in the parish of St. Leonard's, Shoreditch. It gave its name to a prebend of St. Paul's Cathedral, known as the prebend Haliwell (equivalent to Holywell) *alias* Finsbury, which was created in 1104. This prebendary became absorbed in the Archdeaconry of London, which still holds the patronage of the living of St. Leonard's. The well, together with that

part of the field or moor in which it arose, were given, before the year, 1127,[1] to some religious women, by Robert FitzGelran, a canon of St. Paul's; upon which a priory was built "to the honour of Christ, the blessed Virgin Mary, and St. John the Baptist," for Nuns of the Benedictine Order. A Charter of Confirmation was granted to the priory by Richard I., bearing date October 7, 1189, wherein he confirmed the original gift, together with donations subsequently made by others, of certain lands at Dunton, Camberwell, and elsewhere.[2]

The well was probably the "fons sacer" of Fitz-Stephen, and doubtless it acquired additional sanctity from its seclusion within the precincts of the priory. The antiquity of the foundation of the Nunnery may be further deduced from a record in the King's Remembrancer's Office of the Exchequer, dated July 1, 1217, 2nd Henry III.), setting forth that the prioress and convent had held of the King's progenitors from "time beyond the memory of man," certain lands in Alsewyke (manor) in the county of Hertford. Some incidental references to the priory will also be found in Dr. Sharpe's Calendar of Wills enrolled in the Court of Husting, London, in which bequests are recorded in favour of the Conventual House of St. John the Baptist at Haliwell. Two chantries adjoining the south side of the priory

[1] Maitland ("History of London," 1739, p. 772) considers that the priory was founded between the years 1108 and 1128, the dates of consecration and death respectively of Richard de Belmies, or Beaumes I., Bishop of London, during whose episcopate Robert FitzGelran was prebendary of Haliwell.

[2] "Monasticon Anglicanum," Dugdale, vol. iv. p. 293.

church, which had been erected by Sir Thomas Lovell, are mentioned in the will of John Billesdon,[1] grocer, dated in 1522 (*temp.* Henry VIII.), who was a trustee for their maintenance.

Nothing of special importance seems to be recorded from this period until the dissolution of the monasteries, when the last prioress of Haliwell, Sibilla Nudigate, surrendered her house to the King in 1539, (29th Henry VIII.). The site of the priory was soon desecrated : in 1541 a messuage and garden within the precinct was granted to one George Harpur, and in 1544 the freehold of the site was, through the personal influence of Queen Catherine Parr, granted by letters patent of July 23rd of that year, to Henry Webbe. In 1576 a portion of the site belonged to Giles Allen, who leased it to James Burbage, a "joyner," but afterwards an actor, and formed the site of the theatre, where his more famous son, Richard Burbage, acted.

About twenty years later Stow speaks of the well as "much decayed and marred with filthiness purposely layed there for the heightening of the ground for garden plots." In the 1603 edition of his "Survey of London," he says, speaking of the priory : "The Church thereof being pulled downe, many houses have been builded for the lodginges of noble men, of straungers borne, and other ; and near thereunto are builded two publique houses for the acting and shewe of comedies, tragedies, and histories, for recreation, whereof the one is called the Curtein, the other the Theatre, both standing on the south-west towards the Field" (Finsbury).

[1] Cal., ii., 635, Part ii., 1358–1688.

When Dugdale wrote (about 1817) the remains of the Nunnery were confined to some walls, a small arch, and part of a doorway in a back cellar of a public-house known by the sign of the "Old King John."[1] The stone gateway, the last building of any importance which remained, had been taken down about the year 1785. At the beginning of the nineteenth century the chief freehold of the site belonged to a Mrs. Newsam, of Hackney.

In recent times efforts have been made to locate the well, and some of the results communicated to *Notes and Queries*. A Mr. R. Clark[2] drew attention, through the medium of that publication, to an article in the *Builder* of September 19, 1896, which states that "the ancient holy well should be looked for in the area between Bateman's Row and New Inn Yard and behind the Board School in Curtain Road, that is to say, west of New Inn Street." This is all very circumstantial, but the writer bases his statement on the survey by Peter Chassereau, taken in 1745, in which the supposed position of the well is marked by a cross and the words "Ye well from which the liberty derives its name." It should be borne in mind however that, as pointed out by Colonel W. F. Prideaux,[3] Chassereau did not make his survey till more than two hundred years had elapsed from the date of the dissolution of the Nunnery (1539); the position of the well could therefore have been only a matter of tradition. Another contributor to *Notes and Queries* (8th Series, May 22, 1897), quotes an article in the

[1] "Monasticum Anglicanum," vol. iv. p. 390.
[2] *Notes and Queries*, 8th Ser., October 10, 1896.
[3] Ibid., October 31, 1896.

Journal of the Royal Institute of British Architects (vol. iv., 3rd series, p. 237), by Mr. E. W. Hudson, who says that the well of the priory was situate on the south side of what is known as Bateman's Row, but was formerly (before 1799) called Cash's Alley, near Curtain Road. This agrees substantially with Mr. Clark's statement. Mr. Lovegrove, writing in 1904, says: "The well itself is to be found in a marble-mason's yard in Bateman's Row, but is covered over." The same writer notes that of the Nunnery buildings only a piece of stone wall about 50 feet long, in a timber yard at 186, High Street, Shoreditch, is now left.[1]

Hoxton was in the early part of the seventeenth century apparently a place of pleasant conviviality. Thus Beaumont and Fletcher in the "Knight of the Burning Pestle" (first published in 1613), introduce Ralph, dressed as a King of the May, who says:—

"London, to thee I do present this merry month of May;
Let each true subject be content to hear me what I say:
March out and show your willing minds by twenty and by twenty,
To *Hogsdon* or to Newington, where ale and cakes are plenty."

A medicinal spring was discovered in Hoxton late in the seventeenth century, on digging out the cellar for a house near Charles Square, which is reached by a turning out of Old Street, City Road. The waters are described in a little volume entitled, "A Short and Plain Account of the late found Balsamic Wells at

[1] Holywell Priory, Shoreditch, by G. H. Lovegrove, *Home Counties Magazine*, vol. vi., 1904. From this article parts of the foregoing history of the Priory are extracted.

Hoxdon, and of their excellent virtues above other mineral waters." The dedication is to "The Proprietors of the Wells at the Golden Heart in Hoxdon Square," by T. Byfield, M.D., 1687. It was said to be a sulphur spring, with the addition of iron, and according to Dr. Byfield, the waters were capable of combating a whole army of disorders. They were to be taken alone, from one to two quarts, or five pints at most—a fortnight or three weeks together being long enough. "There is," he says, "no unwholesome glebe (concretion) or any dangerous mineral or metal (in them) that casts one unhappy ray into this healing fountain." On the contrary, they set up "such a pretty bustle or ferment in nature that makes gay a well-temper'd Healthy Body."

With regard to the presence of sulphur in the spring, Dr. Macpherson[1] states that "of sulphur wells there are none in or near London." He says that the chalybeate water at Hoxton had a bituminous scum on it, but, strange to say, yielded a pleasant aromatic flavour.

Just below Wapping, and facing the Lower Pool, is Shadwell, which, like the former, was till 1669, when it became an independent parish, a hamlet of Stepney. Lysons writes ("Environs of London," vol. iii. p. 382): "This place (Shadwell), which was formerly called Chadwelle, took its name, as is supposed, from a spring dedicated to St. Chad." The spring has been said to lie buried under a pillar, near the south-east corner of the parish church of St. Paul, within the churchyard, but that the place derived its name from it is at least open to doubt. The question

[1] "Our Baths and Wells," 1871.

of the origin of the name Shadwell is discussed in "East London Antiquities" (1902), a publication devoted to the history, legends, &c., of that part of London. A Mr. Hale and Mr. John T. Page (author of "The Old Wells of Middlesex"), are of opinion that the name is equivalent to St. Chad's Well, and that it was given to a well or spring in this part in very early times. This view is not accepted by Colonel Prideaux, who certainly gives very cogent reasons for his own way of thinking. He finds that so long ago as the seventh year of King Henry III. (A.D. 1213–14), there was a conveyance of land between Benedict Clericus of Stebeheia (Stepney) and Daniel de Stebeheia, of lands in Stebeheia at "Shadewell."[1] "It is difficult to believe," says he, "that the name of St. Chad's well could have been corrupted at this early date, especially as the well of the same name in the parish of St. Pancras retained its original designation during the whole period of its existence. That Shadwell derived its name from some 'fine fountain,' is of course indisputable, and it is possible that the fountain may have been dedicated to St. Chad, but that fact would not necessarily connect itself with the name of the district. There are also phonetic difficulties in the way. The name of the saint 'Ceadda' in Anglo-Saxon becomes 'Chad' in modern English, and it could not become 'Shad.'"

About the year 1745 (some say a few years later), a mineral water of a powerful nature was disclosed by a Mr. Walter Berry in sinking a well in Sun Tavern Fields, formerly known as Vine Tavern Fields, an

[1] "Calendar to the Feet of Fines in London and Middlesex," ed. Hardy and Page, i. 16.

open space of oblong shape which lay between High Street and Cable Street, but long since built over. The water was said to be impregnated with sulphur, vitriol, steel, and antimony. A pamphlet, published by D. W. Linden, M.D., in 1749, by way of a puff, extols it as an approved cure for almost every disorder incident to the human body, either by drinking or bathing. At all events the water proved serviceable as an antiscorbutic, and in all cutaneous diseases; but it was soon found to be too strong for employment internally. Subsequently the water from this spring was used for extracting salts, and for preparing a liquor with which calico printers fix their colours: at that time there were many calico printers at Stratford and Bow. At the east end of Juniper Street, but on part of the site of the Fields, is a short lane or passage connecting Cable Street with High Street, called Sun Tavern Gap, which recalls the old name.

There was another spring in the parish "of a quality resembling that of the Postern Waters on Tower Hill." The latter were close to the Postern Gate, and reached by a descent of several stone steps. Nothing now remains of it, but its position is indicated by Postern Row, formerly facing the north front of the Tower of London.

Hackney is not mentioned in Domesday Book, but it is probable that it was included in the survey of Stepney. Lysons (ed. 1795) mentions an ancient record, dated the 37th Henry III. (1253), in which it is called Hackeneye, thus differing but little from the present name. He prints copious quotations from the church registers, which show that many

noblemen and other persons of consequence had their country seats here, enumerating among its residents an Earl of Northumberland, a Countess of Warwick, and a Lord Brooke. John Strype, the historian, during the latter part of his life was rector of Hackney, where he continued to reside till his death, in 1737, at the great age of ninety-four. Milton's connection with Hackney is only very slight—the father of his second wife, Katherine Woodcocke, is said to have belonged to the place. Nothing more is known of her than can be gathered from the beautiful sonnet he wrote after her death.[1]

In the *Ambulator* of 1774 Hackney is described as "a very large and populous village, inhabited by such numbers of merchants and wealthy persons that it is said there are near a hundred gentlemen's coaches kept."

There were at the latter end of the sixteenth century several wells in different parts of Hackney. Dr. William Robinson, in his "History of Hackney" (1842), mentions Pig's Well—a misnomer for Pyke Well; Churchfield Well, which gave the name to Well Street; a considerable spring on the Downs, continually flowing and said never to freeze; and another well in Shacklewell, from which that place derives its name, but the very site of which is now forgotten. There was formerly, Dr. Robinson says, a chalybeate well a little way out of Church Street, towards Dalston, but which was not in his time in general use. A later writer, Mr. Benjamin Clarke,

[1] She was a parishioner of St. Mary, Aldermanbury. Her marriage with Milton on November 12, 1656, is entered in the register. ("London City Churches," A. E. Daniell, 1896, p. 228.)

writing under the pseudonym of "F.R.C.S." in "Glimpses of Ancient Hackney" (1893), says: "The well which gave its name to Well Street may still exist by Cottage Place, Well Street, latterly covered by a pump affixed to an adjacent wall." This well, he further observes, is believed by Mr. John Thomas, a surgeon of Hackney, to be coeval with the palace of the Priors of St. John of Jerusalem, of which Palace Road is a remembrance.[1] It may have been partially a mineral spring, or at any rate, from its contiguity to a monastic establishment, have had a holy reputation, and hence the road to it would naturally be named after it. Another spring Dr. Robinson thus describes: "Some years ago there was a spring of pure water near the old churchyard and Morning Lane, to which the inhabitants used to resort for water. This well had been for upwards of a century enclosed within a square brick-and-tile building, with a doorway entrance. In the year 1837, for want of proper attention, the old building, or well-house, was found to be in a very dilapidated state, and instead of repairing it the churchwardens of that day thought it would be cheaper to pull it down and set up an iron pump in its place, which was done, and this iron pump, by impregnating the water with

[1] The Templars' House was opposite the entrance of Dalston Lane, in Church Street. Within the memory of the last generation the building was divided into small tenements of a mean description. It was pulled down about 1825. The last volume (published in 1908) of the "Fascination of London" series reproduces an engraving of it, but this obviously was not of such early date as the Templars, and probably stood on the site of a much older building. ("Hackney and Stoke Newington," by G. E. Mitton, 1908.)

the quality of iron, has rendered the water once so celebrated almost useless."

About five miles from Shoreditch Church, lying between Stamford Hill and Edmonton, on the old Cambridge Road, is Tottenham—a place which can boast of some antiquity, being mentioned in the Domesday Survey as Toteham. It has been linked on to the metropolis with more or less continuity for some years past; now an unbroken chain of houses lines the whole route from the City. The etymology of the name may be from *Tot* (Tut), an elevation, the site being a ridge of high ground overlooking the marshes bordering the Lea River, or perhaps it is a patronymic, Toting or Toding, with the suffix *ham* (home), as has also been suggested.

The earliest chronicler of Tottenham was the Reverend William Bedwell, who was vicar of the parish from 1607 to 1632. In his "Briefe Description of the Towne of Tottenham High Crosse" (1631, reprinted 1718), he arranges the "memorable things" in "ternaries," the second ternary (with which this account is concerned) comprising the Crosse, the Hermitage, and the Altar, or Offertory, of St. Eloy.[1] The High Cross still stands nearly opposite "The Green." It is an octagonal brick tower cemented over, having a weather-vane on the top; formerly it had a sundial. An earlier wooden cross was taken down about the year 1600 and rebuilt by Dean Wood; this one

[1] St. Eloy (or Eligius), a saint in the French Calendar, the patron of blacksmiths and farriers. He was born about the year 588, and ordained Bishop of Noyon in 640, holding that see for nearly twenty years. Adjoining the ancient chapel of St. Mary Magdalen, at Kingston-upon-Thames, were two small chapels dedicated to St. Anne and St. Loye.

lasted for over two centuries, but getting out of repair, the inhabitants had it covered with stucco and decorated in the Gothic style. Although generally assumed to be an Eleanor Cross, as at Waltham, it was probably merely one of the wayside crosses once common in the towns and villages of England. It was not a market cross, as there is no mention of a market at Tottenham. It is mentioned as "the hie crosse" in a Court Roll, anno 1456.[1]

The Hermitage and Chapel of St. Anne, dependent on the Monastery of the Holy Trinity within Aldgate, was a small, square building, with a little slip of ground attached to it, which stood on the Common on the east side of the high road, at a short distance southward from the Cross, about midway between it and Blackup Bridge (called Blackhope on a map of 1619), near the Seven Sisters,[2] and it was there within the memory of some persons living in Bedwell's time, but had been turned into a small dwelling-house. The site was afterwards occupied by the Bull Inn, and the slip of ground attached, running along the high road, was covered by a terrace of houses called Grove Place. The Offertory, or Chapel, dedicated to St. Eloy, or St. Loy, is described by Bedwell as "a poore house on the west side of the great rode, a little off from the bridge (over the Mosell),[3] where the

[1] Lysons, "Environs of London," ed. 1811, vol. ii. p. 745.

[2] A clump of seven elms which, tradition says, were planted by seven sisters. These going to decay, the daughters of Mr. J. McRae, who resided in the house close by, planted seven others, just to the east of their predecessors, in 1852.

[3] A little brook rising in Muswell Hill and passing between Hornsey and Tottenham Wood, crossed the parish from west to east, dividing it into two unequal parts.

middle ward--comprehending Church End and Marsh Lane—was determined." He further explains that "the house in which the late Mr. Harding, the stone-mason, lived has been considered to occupy the site of the Chapel, and the slip of ground on the north of it, now partly built upon, was formerly attached to the Chapel." In Bedwell's time the well was "nothing else but a deep pitte in the highway, on the west side thereof between his (St. Loy's) Cell and the Crosse." He also says that it was within memory cleaned out, and at the bottom was found "a very faire great stone which had certain characters or letters engrav'n upon it, but being broken and defaced by the negligence of the workmen, and nobody near that regarded such things, it was not known what they were or what they might signify."

The water of this spring was declared to excel in its medicinal qualities all other springs near it, and in a footnote in Dr. Robinson's "History of Tottenham" (1840), he says that its properties were said to resemble those of Cheltenham Springs. This author reproduces a survey of Tottenham, made by order of the Earl of Dorset in the year 1619, in which there is a field called "South-field at St. Loy's" on the western side of the high road. He speaks of the well as "now to be seen surrounded by willows, close to the hedge-row which divides the above field from Mr. Forster's brickfield, and about 500 feet from the highway; bricked up on all sides, square, and about four feet deep."

Some person concerned in the building extensions in Tottenham—not unmindful of its local history—has named a road after St. Eloy, which, from its position

a little to the south of Bruce Grove, must cover the site of the ancient well.

Another spring, known as Bishop's Well, is described by Bedwell as issuing out of the side of a hill in a field opposite to the vicarage, and falling into the Mose (Mosell) "afore it hath run many paces." The ground was formerly called the Well Field. The well was dried up in draining the cemetery; the main drain intersected the course of the spring feeding the well, which was then filled up. The water was said never to freeze, and like that of St. Eloy's, to be efficacious in the cure of certain bodily infirmities, but particularly for disorders of the eye. It was also in great repute from the purity of its water—so much so that the ladies in the vicinity were in the habit of sending their servants in the morning and evening for water for their tea, from which circumstance it was vulgarly known as "My Lady's Hole." There was also a well in Spotton's Wood, otherwise called Spotton's Grove, on the north side of Lordship Lane, which in the fifteenth century was of considerable notoriety. Tottenham Wood, which lay on the western outskirts of the parish, was in the same century celebrated for its well, which was called "St. Dunstan's Well," and some time since there was an enclosure called St. Dunstan's Well Field, but even in Bedwell's time this, like the others, was almost forgotten.

Before concluding this notice of Tottenham its association with the family of the Bruces should be mentioned. This originated in one of the four manors[1] descending from John, Earl of Chester, to

[1] These were the manors of Brus, Pembroke, Dawbeney, and Mocking.

Robert de Brus, or Bruce, one of his heirs, and the unsuccessful competitor with John Baliol for the throne of Scotland. His elder son Robert, Earl of Annandale and Carrick, to whom the manor (of Bruce) passed, is believed to have built the manor-house, thence called Brus, or Bruce, Castle, where he resided. On his death in 1303, his son Robert the Bruce, of Scottish history, succeeded as his heir. Three years later he was crowned King of Scotland. Edward I. thereupon seized his English estates, and the connection of Tottenham with the Bruces terminated.

The Bruce Castle of to-day is a large brick-built mansion with stone dressings, about half a mile from the high road, on the north side of Lordship Lane and near the parish church. It was rebuilt or new-fronted, as appears by a date in one of the rooms, by the Hare family (Barons of Coleraine) a little before the Revolution (of 1688). Since that time the structure has been considerably altered by various owners, so that very little of the Tudor mansion, which was built by the Comptons in the sixteenth century, remains. The only surviving relic of earlier buildings is a detached tower of red brick, used as a water-tower, an engine-pump under it being connected with a well close by; the water thus procured feeds a cistern above. The grounds have been turned into a public park since 1892, when the Tottenham Urban District Council purchased them with the house for £25,000.

In connection with the little monastic cell or chapel of St. Eloy an interesting question arises. Upon what monastery or convent was it dependent for its endow-

ment, or if not endowed, for its means of subsistence? as it is unlikely to have been self-supporting. Neither Bedwell, Oldfield and Dyson, nor Robinson, the local historians, allude to this point. One would have expected to find the information in such well-recognised works as Dugdale's "Monasticon" or Newcourt's "Repertorium"; but these do not even mention the existence of the chapel of St. Loy, although Dugdale gives a long list of alien priories and cells. In answer to a question which the writer inserted in *Notes and Queries* (10th Ser., vol. vi., November 24, 1906) it was suggested in a reply that at an early date the chapel may have received its endowment from the canons of Holy Trinity in Aldgate, but a search in "Liber Sanctæ Trinitatis de Aldgate" was unsuccessful, no reference to the chapel or its dedication being found there.

Woodford Wells parish lies at the foot of Buckhurst and Chigwell Hills, at the southern edge of the open part of Epping Forest. It is about half a mile north of Woodford Green, with which it is connected by rows of humble roadside cottages and a few villa residences. The hamlet had till recently an old-fashioned country aspect. It owes its name to a medicinal spring which appears to have been in repute for many diseases about the middle of the eighteenth century, but history is silent as to how or when it was discovered. In an "Itinerary of Twenty-five Miles round London," published towards the end of the eighteenth century, the writer thus describes the locality: "A mineral spring, which rises in the forest at a little distance from the 'Horse and Groom' (afterwards known as the

'Horse at the Well') was formerly in good repute, and much company resorted to drink the waters at a place of public entertainment called Woodford Wells; but the waters have long lost their reputation." They, in fact, never approached in popularity those of Hampstead, Epsom, or Tunbridge, nor is their memory, so far as one can learn, enshrined in any popular novel or comedy.

The house of public entertainment was, more than a century ago, converted into a private dwelling-house; but the memory of the "Wells" is kept alive by an ornamental drinking fountain, covered by a tall roof of enamelled tiles, which has been erected over a well in front of some wooden cottages, next to which is the "Horse at the Well" Inn.

In the first volume of "Greater London" (E. Walford, 1898) is an engraving, dated 1884, of the inn and the drinking fountain.

Chigwell is described by Morant ("History of Essex," 1768) as a village in the hundred of Ongar. It lies between the forests of Epping and Hainault, and is about ten miles from Whitechapel Church. In Domesday Book the place is written "Cinguehella," and in rather later records "Cingwella," formed from the two Saxon words *Cyng* and *Welle*, that is, King's Well, pronouncing the *c* hard. The interpolation of the aspirate is not uncommon in words derived from "King," but the dropping of the *n* in Chigwell, while it is retained in Chingford, is difficult to account for. However, there is here pretty clear testimony of a spring at this spot, though it cannot be affirmed with any certainty that the medicinal spring, discovered towards the end of the seventeenth century

at Chigwell Row, was identical with an earlier one, there being no evidence forthcoming that the former was known in ancient times. The position of the purgative spring, for that was its character, was in Chigwell Row "behind the Windmill among the trees." Chigwell Row extends along the north-west edge of Hainault Forest, one mile east of Chigwell, to which parish it belongs. The waters had a warm advocate in Dr. Frewen (or Frewin), a popular physician of the eighteeenth century, and a native of the parish. They, however, never rose to any particular celebrity. When Lysons was writing his history of the environs they were "quite neglected," and in an incomplete history of Essex by Elizabeth Ogborne (1814), the author refers to "the spring of mineral water near Chigwell Row, formerly so celebrated but now considered of little account, and entirely neglected."

Readers of Charles Dickens will recollect that many of the most striking scenes in "Barnaby Rudge" are laid at Chigwell.

Muswell Hill, which is about five and a half miles from London, rising to a height of 341 feet, is part of a chain of low hills extending along the northern limit of the county of Middlesex. The subsoil of the hill consists of chalky and stony clay (Boulder-clay) overlying gravel and sand. Its summit and sides, to the extent of about 160 acres, are occupied by the building and grounds of the Alexandra Palace.

The holy well to which the hill owes its name was near the top on the southern side. The name is met with in a variety of forms—as Mouse-well, Mus-well, Mos-well. In an old newspaper of 1737 the spelling

is Mussel, and in Rocque's Plan (1741–45) it is spelt Muscle. Originally it was probably Moss-well. Norden (1693) says that "at Muswell Hill (called also Pinsenall Hill), there was sometime a Chapel dedicated to Our Lady of Muswell, of whom there had been an image, and a great resort of pilgrims." [1] The pilgrimages arose from a legendary tale of a miraculous cure having been performed upon a King of Scots (whose name, however, does not transpire), who, suffering from some disease, had been divinely directed to Muswell Hill, and healed by the waters. The fame of the well departed at the Reformation, and in the reign of Elizabeth, when Norden wrote, its supernatural virtues had all evaporated, though the tradition upon which they were founded was still current. He tells us that on its site a "proper house" had been erected by Alderman Roe.[2] It is matter of history, however, that the fraternity of St. John of Jerusalem, whose headquarters were in Clerkenwell, had land at Muswell Hill conferred upon them by Bishop Beauvais, or de Beaumeis, in 1112 (12th of Henry I.), he being in right of his office as Bishop of London, Lord of the Manor of Hornsey. The Cartulary of Clerkenwell has been searched but no other early particulars of Muswell have been found than the few words in a confirmatory charter of Henry II.—"Ex dono Ric' ep'i Lund'—terram de Mosewlle"; and in the recital of the confirmation by King Stephen of the grant of Bishop de Beauvayes, no places are named. The

[1] "Speculum Britanniæ," John Norden, published 1693, reprinted 1723, pp. 36–37.

[2] Sir Henry Roe, Alderman of London: buried at Hackney, February, 1612.

original deed of gift had probably been lost, when the Cartulary was compiled.[1] Upon the land presented to them the aforesaid fraternity, besides building a chapel for the benefit of some nuns, established here a kind of dairy farm, of which these nuns had the management. It is a somewhat curious circumstance that this property, of some 64 acres, originally bestowed on the Knights of St. John of Jerusalem, whose great house was in Clerkenwell, to which the property was an appendage, is still successfully claimed as a portion of the parish of St. James, Clerkenwell.

To whom this property was granted on the fall of the Papal Church in England does not appear, but the farm-house and site of the chapel, or, as described in some ancient records, the Manor of Muswell, were alienated in the 38th year of Henry VIII. (1546–47) by William Cowper and Cecily his wife to Thomas Goldynge. After other changes of ownership the premises were alienated or sold in the 20th of Elizabeth (1577) by Anne Goodwyn and John Wighell to William Rowe and his heirs. In the 34th of Elizabeth (1591), there was an alienation from Roe to Muffet, but this was a family conveyance, Sir William Rowe having married into the Muffet family. The property continued in the possession of the Rowe family till the latter end of the seventeenth century. Newcourt, writing *circa* 1700, says: "Muswell Hill farm was lately sold (as I am informed), by Sir Thomas Rowe."[2] It came either at that time, or soon after-

[1] Gibson's "Essay on the History and Antiquities of Highgate," 1842.

[2] "Repertorium Ecclesiasticum," Richard Newcourt, Cole's copy, 1710, vol. i. p. 653.

wards, into the possession of the family of Pulteney, and is now, says Lysons (1795) the property of Lady Bath (widow of the second Marquis), on whose death in 1825 it devolved, under Sir William Pulteney's will, on the Earl of Darlington. The family of Rowe of Muswell Hill became extinct in the male line in the person of Anthony Rowe, who was buried at Hackney in the year 1704.

When Cromwell wrote (1827–28)[1] the wells were two in number and "in good preservation, being bricked round to the depth from which they seemingly spring (about five and a half feet), and enclosed by wooden railings in a field. Though only a few yards asunder their waters differ in quality, one being hard, sweet, and beautifully pellucid, while the other more nearly resembles rain water, and is used only for the purposes to which the latter is commonly applied."

In recent times the inhabitants of Muswell Hill, who from time immemorial had enjoyed the benefits of the ancient well, were temporarily deprived of them by one of the owners of the estate on which it is situate, who had the mouth closed. It was a serious privation for the poorer inhabitants, as wells could not, except at great expense, be sunk on the southern side of the hill on account of the immense depth of the London clay; while on the northern side the wells were on the premises of the well-to-do classes only, and the waters of these wells proved on analysis to be much inferior to that of the Muswell. After fruitless negotiations an action was commenced to establish the public right to use the well. The result was that the defendant

[1] "History of the Parish of Clerkenwell," J. S. and H. S. Storer; the historical part by Thomas Cromwell, 1828.

submitted and judgment was given for the plaintiffs, April 26, 1862.[1] Since then clauses have been inserted in the Muswell Hill Act upholding the people in their full enjoyment of the well. It was some years ago arched over with brick, and afterwards supplied by the Alexandra Park Company with a pump, in which form it might be seen on the east side of Colney Hatch Lane. The water, diverted by building and road-making, has disappeared; of late years it was only polluted surface drainage.[2]

[1] "The Northern Heights of London," William Howitt, 1869.
[2] "History, Topography, and Antiquities of Highgate," John H. Lloyd, 1888.

CHAPTER VI

NORTH-WEST LONDON GROUP OF WELLS AND SPAS

Hampstead — Geological features described — Chalybeate wells—The Assembly Rooms in Wells Walk; celebrities who frequented them—Wells Charity Estate and Baptist Noel, Earl of Gainsborough—Mr. Goodwin's discovery of a medicinal spring near Pond Street—Analysis of the Wells Walk spring—Barnet Wells—Purgative spring—Visited by Pepys — Lysons' mention of it — Chalybeate spring at Northaw—Trick of practical jokers—Acton Wells—An attractive resort in Queen Anne's reign—Kilburn Wells and Priory—History of the latter—Pleasure gardens attached to the Wells—Analyses of the waters.

BEFORE describing the springs and wells at Hampstead, it is advisable to mention briefly the geological structure of the beds forming the hill, but without entering into particulars of sections and other details, which are dealt with by the authors who have written on the geology of the district.[1] The outlines of Harrow, of Hampstead, and of Highgate, are perhaps the most prominent objects in

[1] The few remarks here made on the more prominent geological features of Hampstead are chiefly derived from the following: "Whitaker's Guide to the Geology of London and Neighbourhood," 5th ed., 1889; "Paper on the Geology of Hampstead," by Caleb Evans, Proc. Geol. Assn. 1873; "Hampstead Wells," Geo. W. Potter, 1904.

Middlesex, the highest point of Hampstead rising to an altitude, at Jack Straw's Castle, of 443 feet above the Ordnance datum. On the upper and highest part lies a horizontal bed of sand, mostly coarse, yellow, and ferruginous, but occasionally fine and light-coloured, interstratified here and there with thin layers of clay—a capping, in fact, of the Bagshot sand series—which at the summit is about 80 feet thick.[1] Underlying this deposit is a bed of brick earth, the thickness of which is about 50 feet. Beneath this and cropping out on all sides down the slopes of the hill is the London clay, here 400 or more feet thick,[2] and being impervious to water, the sand resting on it forms a water-bearing stratum or catchment area, and hence, flowing along the line of junction from the sides of the hill, issue copious springs for which Hampstead has long been noted. Some of these have gradually formed by erosion several well-defined valleys which can be traced even at the present time. Each of these contained up to sixty or seventy years ago its own rapidly-flowing streamlet. Of these the most important was that which extended from Flask Walk down a rather deep valley (since filled up), by what is now known as Willow Road, to South End Green and the Kentish Town Fields. This was the main source of the Fleet River. Another streamlet, running in a north-

[1] In sinking the shafts in 1904 for the Hampstead Tube Railway at the corner of High Street and Heath Street, the London clay was met with at only 16 feet below the surface, showing how the sandy bed thins out.

[2] It is of course only where the Bagshot sand occurs that the whole thickness is found, the upper parts having been worn off elsewhere. (Whitaker's "Geology of London," p. 48.)

westerly direction through Golder's Hill and the fields beyond, joins the Brent River at Brent Bridge.

For some years before the end of the seventeenth century the curative properties of the chalybeate springs in Hampstead must have been known in a greater or less degree to the dwellers in the village of Hampstead and the neighbourhood. The earliest information of a tangible kind regarding the principal spring has come down to us through the evidence of a halfpenny token, issued by one "Dorothy Rippin at the Well in Hamsted"; these words being on the obverse side, with a representation of a well and bucket, and although undated the period of issue is known to have been that of Charles II.[1] A still earlier reference to a well here, which is mentioned in Park's "History of Hampstead," is apparently contained in the writings of Michael Spark, a poetical stationer, towards the end of the Commonwealth period, in the line :—

Air, and hill, and *well* and school,"

the school being one established at Hampstead by John Amos Comenius, the Moravian grammarian and divine.

In the year 1698 the Honourable Susannah Noel, Countess of Gainsborough, executed an Indenture, on her own part and that of her son Baptist, third Earl of Gainsborough (then a minor and lord of the manor of Hampstead), making over the medicinal spring,

[1] "London Pleasure Gardens of the Eighteenth Century," W. Wroth, 1896, p. 177. The only Hampstead token recorded by Boyne ("Tokens issued in the Seventeenth Century," 1858) with a date, was one issued in 1670.

together with 6 acres of heath land lying about and encompassing it, for the sole use and benefit of the poor of Hampstead for ever. These 6 acres of waste land, now known as the Wells Charity Estate, were vested in the names of fourteen trustees, who became tenants under a copyhold grant, at a nominal rental. To the poor of Hampstead the gift was of small benefit, at this time and for many years afterwards. The trustees, however, seem to have fully realised that they had in the spring a valuable asset; they accordingly took measures to increase the profits derivable from it, as is shown by the following advertisement (here slightly abridged) which they caused to be inserted in the *Postman* of April 18–20, 1700: "The Chalybeate Waters at Hampstead being of the same nature and equal in virtue with Tunbridge Wells and highly approved of by most of the eminent physicians of the College, as likewise by many of the gentry who formerly used to drink Tunbridge Waters, are by direction of the Trustees of the Wells aforesaid, for the conveniency of those who yearly drink them in London, carefully bottled up in flasks and sent to Mr. Philps, Apothecary, at the 'Eagle and Child,' in Fleet Street every morning (for sale) at the rate of 3d. per flask, and brought to person's houses at 1d. a flask more."

This attempt to exploit the waters does not appear to have met with much success. The difficulty and expense of carriage to and from London must have been a great obstacle to any extensive sale of the waters. The old Flask Tavern in Flask Walk, where the waters were said to have been bottled, was taken down a few years ago. The chalybeate

A. S. Foord fecit.

HAMPSTEAD ASSEMBLY AND PUMP ROOMS IN WELL WALK.

From "Records of Hampstead"; by permission of Mr. F. E. Baines.

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water which furnished the supply for this sale in London was not, as most people think, the spring in Well Walk, but was taken from the head spring or pond situated about 100 yards higher up the hill, in the Well Road. The Bath Pond, Mr. Potter observes, was only filled up about twenty-five years ago. "I have often seen it," says he; "it was a rectangular piece of water, about 40 feet long, by 20 feet wide, and rather deep."

Mr. Philps, to whom it could not have been a very profitable venture, either relinquished, or had taken from him, the monopoly of selling the water from the spring, and a Mr. Adams, a potter, or seller of pottery at Holborn Bars, was now the only person employed by the Trustees to deliver the water.

The person who actually erected the wells buildings was one John Duffield, to whom the mineral spring, together with the 6 acres of land, was let under a lease or agreement from the Trustees bearing the date June 2, 1701. The few buildings which Duffield found around the wells were temporary structures, standing on the east side of the Wells Walk. The first important erection was that known sometimes as the Great Room, as the Long Room, the Assembly Room, and the Pump Room—for all these names have been given at one time or other to the large room in Well Walk. Some thirty years later another set of buildings, in the same thoroughfare, but more to the westward, came into existence, and they also were designated as the Long Room, the Ball Room, and the Assembly Rooms. These two distinct sets of buildings, bearing the same names, have led to some confusion, making it difficult for the

readers of histories of Hampstead to readily distinguish between them. Mr. Potter, in his invaluable book on Hampstead Wells, has made the point quite clear.

The Assembly or Ball Room, built by Duffield, was of large dimensions, measuring 36 feet by 90 feet, of which a length of 30 feet seems to have been divided by a partition from the other, and known as the Pump Room; the two rooms being thus under one roof, and situated near where the entrance to Gainsborough Gardens now is. A tavern, called the "Green Man"[1] (now the Wells Tavern, built on its site in 1849–50), a chapel known as Sion Chapel,[2] and various shops were next built. Gardens were laid out, and these included a large bowling-green.

The searcher of old newspapers will find that advertisements constantly appeared of concerts and other entertainments to be held in the Long Room. The earliest recorded of these, issued by Duffield and his associates, appeared in the *Postman*, of August 14–16, 1701: "At Hampstead Wells, on Monday next, being the 18th of this instant, will be performed a Consort of bothe vocal and instrumental musick with some particular performance of both kinds by the best masters, to begin at 10 o'clock precisely. Tickets will be delivered at the Wells for 1s. per ticket and dancing in the afternoon for 6d. per ticket to be delivered as before." Similar notices continued to appear in the London Press for some years; in one of

[1] In 1721 it was called the White Stone Inn. On the site of the Pump Room is a new red-brick house called Wellside, built in 1892, according to an inscription on the walls.

[2] This chapel seems to have disappeared before 1719, as it is not mentioned in a description of the property at that date.

May 5–8, 1702, it is notified that "the tickets will be 1s. by reason that the room is so large." In another of the same season—*Postman*, May 28–30, 1702—it is stated that 1s. will be the price of each ticket, "by reason the room will hold near 500 persons." In the *Tatler*, No. 201, July 22, 1710, a benefit "consort" was announced for which the charge for tickets was 2s. 6d. each.

The medical faculty, as may be supposed, took an active part in recommending the waters to their patients. One of the first to draw attention to their medicinal value was a resident physician—Dr. Gibbons—in the early years of the eighteenth century, who pronounced them "not inferior to any of our chalybeate springs, and coming very near to Pyrmont in quality." He himself set a practical example in taking them until his death in 1725. Several other doctors of lesser note joined in praising these waters. In 1734 a serious effort was made to revive their reputation by Dr. John Soame, a physician of some repute in Hampstead, who, in that year, published a book entitled "Hampstead Wells, or Directions for drinking the Waters," but in spite of his strong advocacy of the spring, which he called the "Inexhaustible Fountain of Health," the number of visitors to Hampstead to drink the waters gradually fell off. However, in 1802, another attempt was made to attract the attention of the London public to the medicinal waters of Hampstead. In that year there appeared in the *London Medical Review and Magazine* (vol. vi.) an analysis of the waters by John Bliss, Member of the Royal College of Surgeons, the result indicating a pure chalybeate water, contain-

ing few earths besides the iron. His treatise claims for the waters that "they have been found very beneficial in chronic diseases, &c., and where there is general debility of the system." Two years later—1804—a local surgeon, Mr. Thomas Goodwin, discovered another medicinal spring at the south-east extremity of the Heath, near Pond Street.[1] He seems to have made a special study of medicinal waters, and embodies the results in a little book entitled "An Account of the Neutral Saline Waters recently discovered at Hampstead" (1804). The analysis he gives shows a great preponderance of sulphate of magnesia, and his conclusion is that these waters have an affinity to the saline spa at Cheltenham. The position of the spring cannot now be exactly determined, but it must have been very near to where the Hampstead Heath Railway Station now stands, although Mr. Goodwin marks the position of the "New Spa" on a map in his book somewhat farther north.

Having now mentioned the last of the attempts by doctors to make known to the general public the health-restoring qualities of the Hampstead springs, some account of the principal building and its ultimate destiny must be given. In the year 1719, his interest in the 6 acres of land and

[1] Professor John W. Hales on "Hampstead in the Tenth Century, being notes on two Anglo-Saxon Charters relating to Hampstead in the times of Kings Eadgar and Æthelred" (1885), inclines to the opinion that a pound once stood in Pond Street. It was the fashionable Street in the eighteenth century for the reception of visitors of the class dignified as the "quality." It appears as Pound Street in Rocque's map (1741–45). [Trans. London and Middlesex Ach. Socy., 1885.]

the buildings upon it were demised by Duffield to a Mr. William Luffingham, at a rack-rent of £450 per annum. Six years after this (1725), Luffingham, finding the Long Room did not answer, transferred it for a long term of years to William Hoare, who undertook, at his own expense, to fit it up for a chapel. The work of converting it was, therefore, carried out at this date, namely 1725;[1] not 1733, as quoted by Park and Howitt. The date was inscribed upon the bell and the altar-plate; on the former were the words, "New Chapel, Hampstead, 1725, and on the latter, "Nova Capella de Hampstead, 1725."[2] It was known as the Well Walk Chapel and was so used till 1861–62, when the new Presbyterian Church, in the High Street, was built. In 1862 the newly formed corps of Rifle Volunteers (3rd Middlesex), hired the chapel for a drill hall, and it was in fitting the building for its new purpose that some interesting discoveries were made. In the wall at the north end, a large niche or recess in the thickness of the wall was revealed, with traces of a basin and pipes having been fixed in it (which had been removed to a building called the Wells House, near the Green Man Tavern). This was evidently the spot where the basin and fountain, which supplied the visitors to the Spa, used to stand. At a later date—about 1874—while some workmen were washing off the old colouring from the walls, life-sized figures of the Nine Muses, with the name under each, appeared on spaces between the windows, at the sides of the room farthest

[1] "Hampstead Wells," G. W. Potter, 1904, pp. 58–59.
[2] "Sweet Hampstead," 1900, Mrs. C. A. White, p. 271.

from the Pump-Room end. These discoveries placed the original use of the room beyond all doubt.[1]

Much has been written of the fashionable era at Hampstead. The company who flocked to the wells in the reign of Queen Anne was considerably mixed; adventurers of both sexes found their way to the upland hamlet, and the idle and dissolute, as well as the invalid and ennuyé, anxious to get rid of that wearisome attendant, self, mingled with personages of rank and fashion and learning. These last included many distinguished members of the Kit-Kat Club, whose headquarters during the summer months was the Upper Flask Tavern—Dr. Garth, Addison, Swift, Sir Richard Steele, Dr. John Arburthnot (the Queen's physician), and others. A passage from Baker's comedy of "Hampstead Heath," produced at Drury Lane Theatre in 1706, put into the mouth of one of the characters, gives some little insight into the kind of company brought together at this time: "Assemblies so near the town give us a sample of each degree. We have Court ladies that are all air and no dress, City belles that are over-dressed and no air; and country dames with broad brown faces like a Stepney bun; besides an endless number of Fleet Street sempstresses that dance minuets in their furbeloe scarfs, and their clothes hang as loose about them as their reputations. . . ." To the other sex—the fops and the beaux—we are not introduced. That the subject

[1] The size of the Long or Great Room in Wells Walk was 90 feet long by 36 feet wide; a length of about 30 feet of this being doubtless used as a pump-room, divided from the larger room probably by some sort of partition.

A. S. Foord fecit.

HAMPSTEAD (NEW) ASSEMBLY ROOMS.

From the print by Chatelaine of 1745 in Lysons' "Environs of London," Guildhall Library.

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had not altogether lost its hold on the play-going public may be inferred from the production of the comedy or farce with the title of "Happy Hampstead," at the Royalty Theatre, in the year 1877. The pages of "Clarissa Harlowe" (1748) contain references to Hampstead, more especially to the Upper Flask Tavern, to which readers of Richardson will remember the unhappy heroine fled from the persecutions of the libertine Lovelace.

The entertainments—those indispensable auxiliaries to the successful running of a Spa—continued to be popular for a period of some twenty years, and during the season, which lasted from May or June till Michaelmas, the wells must have presented a scene of gaiety probably unsurpassed by any similar resort. But among the indoor amusements gambling filled an important place; high play, with probably a considerable admixture of unfair play, was rife here as elsewhere. As early as 1709 the tavern and raffling shops had acquired a sinister reputation: before 1725 the latter, and with them the gaming tables, had disappeared.

It was not to be supposed, however, that the people of Hampstead, after being so long accustomed to their public assemblies, could, all at once, dispense with them. They therefore cast about for a site for a new set of rooms;[1] this they found ready to hand, a short distance westward of the old rooms in the same thoroughfare, where some buildings

[1] For a description of these new Assembly Rooms in Weatherall Place, the reader is referred to Mr. Potter's book, already quoted, and to an article on the subject in the *Home Counties Magazine* for January, 1909, by the present writer.

already stood, which, by dint of enlargement and the addition of a new ballroom, erected about 1735, answered all requirements.

Many are the associations connected with Well Walk, which can only be touched upon. In 1817–18 Keats took lodgings here, in the first or second house on the right hand going up the Heath. Here the greater part of "Endymion" was written. Sitting on a bench at the upper end of the Walk, overshadowed by lime-trees, which for beauty have been compared with the "Cathedral Aisle," near Killin, Hone last saw "the poet of the Pot of Basil, sobbing his dying breath into a handkerchief, glancing parting looks towards the quiet landscape he had delighted in, musing as in his 'Ode to a Nightingale.'" [1] Keats's bench, so marked by a printed sign, stood in its old place next the Heath in 1885. Both have disappeared, but the Heath that he loved is preserved to us—

> ". . . where sweet air stirs
> Blue hare-bells lightly, and where prickly furze
> Buds lavish gold; . . ."
>
> "ENDYMION."

With Hampstead the name of the painter Constable will always be associated. The Memoirs of his life by Mr. C. R. Leslie, R.A., contain several of his letters, some of which are addressed to his friend Archdeacon Fisher, and others to Leslie himself; these show his permanent residence "in a comfortable little house in Well Walk" to have been

[1] "Hone's Table Book," 1827–31, p. 810.

from 1827 till about 1834, in which year his biographer prints the last letter written from there. Like Gainsborough and Crome, Constable always proved himself a heartfelt lover of English cultivated scenery. "I love," he said, "every stile, and stump, and lane in the village; as long as I am able to hold a brush I shall never cease to paint them."

Mrs. Barbauld, well-known by her prose writings, her "Address to Life," and other poems, settled in 1785 at the then rural village of Hampstead. In 1802 she and her husband left Hampstead for Stoke Newington. Other famous names more or less closely connected with Hampstead are those of Shelley, Coleridge, Leigh Hunt, Collins, Clarkson Stanfield, and Joanna Baillie.

Analyses of the Hampstead chalybeate water have been made at different times. Probably the earliest is that by Dr. John Soame, made some time before 1734, the year in which he published his book on "Hampstead Wells." He found that "distilled, a gallon yielded between 5 and 6 grains of a kind of saline concretion, mixed with a yellowish earth, and had a taste somewhat like vitriol of iron" (sulphate of iron). Dr. Donald Monro in his "Treatise on Mineral Waters" (1770) describes it as a transparent chalybeate water lighter than New River water that had been boiled, but heavier than distilled water; which bears carriage and retains its chalybeate quality after having stood six hours in uncorked bottles. An analysis of the water from the Well Walk springs was made in 1870 by direction of the Metropolitan Board of Works, and another in 1884 from the fountain in Well Walk after removal to its

new position on the west side near No. 17, was made by Dr. Atfield, to which a note is appended that the chalybeate water had become mixed with surface water.

A description of the state of the spring in 1889 by Professor C. Heisch, F.C.S., is quoted at length by Mr. F. E. Baines in his Records of Hampstead (1890). The water used for analysis was taken from a shallow well in the back-yard of No. 17, Well Walk, believed to be over the source of the spring. The great difference between the composition of the water now and when formerly analysed, Professor Heisch attributes to the fact of the main spring having been diverted so that the water decomposes before it can be got at. It has no taste of iron and changes rapidly even in well-stoppered bottles, and if any use of the water could be made as a chalybeate, it could only be by having a pipe direct from the well to the fountain.

About 1885 the public basin which stood on the east side of Well Walk was removed and a new stone drinking fountain was placed by the Wells Charity on the opposite side, resting against the banked-up foot-path, with an inscription to the effect that it is in memory of Susanna Noel's gift. Here the waters may still be tasted, but that is all; the water dribbles out too slowly to get a full draught of it. There is, in fact, a notice warning persons against drinking the water on account of the risk of injury to their health. Yet down to about the fifties, when Mrs. White was collecting materials for her book, "Sweet Hampstead and its Associations," it was quite common for working men from Camden and Kentish Towns, and places much farther off, to make a Sunday morning's pilgrim-

age to Hampstead to drink the water, and carry home bottles of it as a specific for hepatic complaints and as a tonic and eye-wash.

From the nature of the soil of Hampstead its waters are more or less impregnated with iron, and therefore unfit for general use. The hill had for years yielded an abundant and constant supply of water, for we read of "dyvers greate and plentyfull springes at Hampstead Heath," which in fact was, as early as the sixteenth century, one of the chief sources of water-supply to London. But it is probable that the water was only sparingly used for potable purposes, if at all, for it is known that the inhabitants of London were not water-drinkers — they chiefly drank small ale at their meals. The old conduits and other sources of water-supply in Hampstead are so fully described by Mr. Potter,[1] that mention need only be made here of the Shepherd's Well, a spring in Shepherd's or Conduit Fields, on the eastern side of a broad belt of meadows which formerly separated Hampstead from Belsize Park and Kilburn. FitzJohn's Avenue, formed in the year 1878 covers the site of the Fields.[2] The spring here, protected by an arch of masonry, was the last at which the water-carriers plied their calling, conveying it to different parts of the village, and charging 2d. or 3d. a turn (two bucketfuls), according to distance. The last of these water-carriers died an inmate of the workhouse at New End about 1868.

Drawings and engravings of both the old and the

[1] "Hampstead Wells" chap. ii.

[2] The site of Shepherd's Well is marked by a drinking fountain on the right-hand side, rather more than half-way up FitzJohn's Avenue.

new Assembly Rooms in Well Walk are in existence. Of the former there is an Indian ink drawing of the exterior by E. H. Dixon, reproduced by Mr. F. E. Baines in his "Records of Hampstead," and by Mrs. Caroline A. White in "Sweet Hampstead." A good view by Chatelaine of the second or new set of Assembly Rooms, which faced the open heath, is in Lysons' "Environs of London": the engraving, dated 1745, has been copied into most books in which Hampstead is described, but not always with proper regard to accuracy.

Analyses of the chalybeate water have been made at different times; it will be sufficient here to give one made by Dr. Atfield in 1884 from the fountain in Well Walk, after removal to its new position on the west side, near No. 17.

	Grains per gallon.
Carbonate of iron	1·82
Chloride of potassium	4·08
Chloride of sodium	5·30
Nitrate of sodium	8·58
Ammoniacal salts	0·06
Sulphate of calcium	20·42
Carbonate of calcium	1·00
Carbonate of magnesium	5·00
Silica	1·20
Organic matter (nitrogen)	0·05
	47·51

NOTE.—This appears to be a chalybeate water mixed with ordinary surface water. If this could be excluded a purely chalybeate water would probably be obtained.

A medicinal spring of a purgative character was discovered about the middle of the seventeenth

century about a mile south-west of the town of Chipping Barnet, or, as it is commonly called, High Barnet, on the south of the road to Elstree. The first notice of the spring is in *The Perfect Diurnal* for June, 1652, in which its discovery is noted and its medicinal virtues extolled. A brief allusion is made by Childrey in his "Britannia Baconica," published in 1661, to the fact that there were at Barnet "medicinal waters very famous." Fuller, in his "Worthies of England" (Hertfordshire), says that already (1662) "the catalogue of the cures done by this Spring amounteth to a great Number, inasmuch that there is Hope, in process of Time, the water rising here will repair the blood shed hard by, and save as many lives as were lost in the Fatal Battle at Barnet."

It is not surprising to find mention of Barnet Well in the Diary of the gossipy but entertaining Mr. Pepys. That worthy paid the place a visit on July 11, 1664, accompanied by his wife and his man Will. He records how he took five glasses of the water, and it is not to be wondered at that when he reached home he was not very well, and so went betimes to bed, but not to sleep; during the night he got worse and worse, till, in his own words, he "almost melted to water." On Sunday, August 11, 1667, he made another journey to Barnet, arriving there at seven o'clock in the morning, and found many persons drinking even at that early hour. Remembering his former experience, he took only three glasses, and then went to the "Red Lion," where he says he did eat the best cheesecakes he ever did eat in his life, and so to Hatfield, to the inn next

my Lord Salisbury's House, and there rested himself, and bespoke dinner, and so to church.

Dr. Robert Wittie (or Witty), in his account of Scarborough Spa[1] in 1669, has these doggerel lines:—

> "Let Epsom, Tunbridge, *Barnet*, Knaresborough be
> In what request they will, Scarborough for me."

In the year 1677 Alderman John Owen, a citizen and fishmonger of London, left the sum of one pound yearly for keeping the "Physick Well" in repair, "as long as it should be of service to the parish." This money is still, or was till recently, paid out of the funds of the Grammar School. Sir Henry Chauncy in his "Historical Antiquities of Hertfordshire" (1700), says of the waters that the mineral impregnating them is "supposed to be allom, but must certainly be a mixt fixt salt of which 'tis hard to determine," and that "they are of great efficacy in cholics."

Lysons, whose account of Barnet was published in 1796, says, in speaking of the well: "It is now in decay and the water little used." However, it continued to be used for some years after this, as in 1812 Dr. W. M. Trinder published a pamphlet on the Barnet Well water, describing it as somewhat brackish in taste, though by no means disagreeable. The well was then "in a little field, encompassed by a brick building." The water contained a large percentage of sulphate of magnesia, and taken in moderation it was a good cleanser of the system.

The old well-house, observes Mr. Thorne, in his "Environs of London" (1876), was pulled down,

[1] A later edition in Latin appeared in 1778. (Brit. Mus.)

and a small farmhouse erected on the foundations in 1840. The well was then covered over, and the water obtained from it by a small iron pump. It was quite open to every one, and was occasionally resorted to by invalids. It can still (1906) be seen in the field belonging to Mr. Vyse, the present proprietor of Well House Farm, and is reached by a public footpath from Well House Lane, but as the authorities do not keep the pump in order no water can be drawn from it.

At Lower Cuffley, a valley lying about midway between the villages of Northaw[1] and Cheshunt, is a saline-chalybeate spring, which at the time when the Royal Court was held at the neighbouring Palace of Theobalds, was much resorted to, but it suffered the fate of similar places, and its medicinal qualities seem to have lost their virtues as soon as the spring ceased to be fashionable. The low wall, says Mr. Cussans ("History of Hertfordshire," 1881), which enclosed it has long since gone, and the spring itself, by subsoil draining around it, can now with difficulty be traced. Dr. Monro in his "Treatise on Mineral Waters" (1770), speaks of analyses made by Dr. Rutty[2] at Dublin of this and of the Barnet spring: there was not much difference between them,

[1] It is not mentioned in the Domesday Survey. In old manuscripts it is written Northeah, Northolt, Northaga and Northoe. In more modern books and documents North-Hall; but this is a mere vulgar corruption. If Northeah is its proper designation it would signify the North Hill—if Northolt, the North Wood. (Cussans, "History of Hertfordshire: Hundred of Cashio," pp. 42–43.)

[2] Author of "Methodical Synopsis of Mineral Waters," 1757.

but the latter was the stronger tasted of the two; neither of them were very powerful. The Northaw water must have contained a considerable quantity of iron, as a favourite diversion of the inhabitants was to induce strangers to make tea with it. Though perfectly colourless, as soon as the boiling water was poured on the tea the iron combined with the tannin, and formed a kind of ink—as much to the astonishment of the tea-makers as to the delight of the practical jokers.

Writers in the early years of the nineteenth century describe East Acton as a village situated on an eminence just off the Uxbridge Road and about five miles from Tyburn turnpike, near where the Marble Arch stands. At the south-west corner of the Old Oak Common, by Wormwood Scrubs, in the angle between the Great Western and the Midland and South-Western Junction Railways, stood Acton Wells House, in the garden of which were three springs of mineral water that attracted attention as purging waters in the opening years of Queen Anne's reign. Bowack, in his "Antiquities of Middlesex" (1706), alludes to the famous mineral spring at East Acton. Lysons (1795) says: "The water is impregnated principally with calcareous glauber salt, and is supposed to be more powerfully cathartic than any in the kingdom of the same description, except that of Cheltenham. The quantity of salts in a pound weight (avoirdupois) of the Acton water is 44 grains." In the days when it was fashionable to drink the waters, East Acton and Friars Place (a small adjacent hamlet) were thronged with valetudinarians and pleasure-seekers of all ranks, some of whom

A. S. Foord fecit.

ACTON WELLS ASSEMBLY HOUSE, 1795.

From Lysons' "Environs of London," Guildhall Library.

To face p. 156.

came to reside here during the summer season. Dr. Macpherson says these wells were very fashionable from about 1730 to 1790. An advertisement of July 3, 1771, states: "By the recommendation of Physicians and the encouragement of the nobility and gentry Acton Wells are newly opened for the benefit of the public. Every Monday, Wednesday and Friday from Lady Day to Michaelmas, are public days for drinking the waters and breakfasting." Every subscriber for a whole family was charged a guinea a year, and every single subscriber half a guinea, for which they had the use of the New Room, and the water either on the spot or at home. Each non-subscriber had to pay 1s. for water and salts. The water was also supplied in casks at 3d. per quart. It was on sale by agents in Piccadilly, Pall Mall, Ludgate Hill, and at "Mr. Owen's original mineral water warehouse in Fleet Street." Advertisements in much the same strain appeared from year to year, to most of which the name of C. W. Gardner, Proprietor, is affixed. One dated April 13, 1776, seems to foretell the closing of the springs at no distant date; it informs the public that "as Mr. Owen finds the demand for the water very trifling, the sale is suspended to subscribers." The wells seem to have gone to decay before the end of the eighteenth century: the *Ambulator* for 1796 states that the Assembly Room "being nearly in ruins is about to be converted into two tenements." When Mr. J. Norris Brewer was writing his "Descriptive Survey of London and its Environs," about 1815, the Assembly-house was occupied as a boarding school.

Walford says in "Greater London" (1884): "The site of these wells is still to be made out in the kitchen garden of a farmhouse near the Great Western Railway, and close to Old Oak Common." No print of the wells, he adds, is known to exist, and the place appears to have escaped notice in the satires and comedies of the day. They are, however, mentioned in Boyle's works and by Allen and Hofmann in their treatises on mineral waters.

Acton Wells are shown, with a plan of the gardens, on Rocque's Map of London (1741–45) on the west side of Old Oak Common. On good modern maps a house called Well House is marked about three-quarters of a mile to the south of Willesden Junction, but whether it had any connection with the Wells is doubtful. There is a drawing of the Acton Wells Assembly Room, dated 1795, in a fine edition of Lysons' "Environs" at the Guildhall Library.

The little brook called the Kilburn—Keelebourne (*Keele*, cold, and *burn*, brook), sometimes, especially in early documents, called the Cunebourne,[1] rose near West End, Hampstead. It was an affluent to the Westbourne, according to some, but others say that this stream, which is the same that passed southward to the Serpentine and emptied itself into the Thames at Chelsea, was called in its lower course the Westbourne. To the antiquary, the interest in Kilburn

[1] Howitt derived it from the German *Kohle*, coal-burn; and it has been derived from the German *Kühl*, cool-burn. A more romantic origin is from *Kühleborn*, the evil spirit in the legend of Undine.

will always be centred in the memory of its priory. The earliest mention of the locality is when a pious recluse named Godwyn retired here in the reign of Henry I., and built a cell or hermitage near the Kilburn rivulet, on a spot surrounded with wood. The lines in Spenser's "Faery Queen" might almost have been written to describe this little domicile:—

"A little lowly hermitage it was,
Down in a dale, hard by a forest side;
Far from resort of people, that did pass
In traveill to and froe; a little wyde
There was an holy chappell edifyde;
Wherein the hermit dewly wont to say
His holy things, each morn and eventyde;
Thereby a chrystall streame did gently play,
Which from a sacred fountaine welled forth alway."

The cell was close to the Watling Street, and the prospect of London was on the left to St. John's Wood, but in front and to the right the outlook was across the meadows from which the Kilburn ran towards Bayswater. Between the years 1128 and 1134 Godwyn made over his hermitage to the conventual church of St. Peter, Westminster. The Abbot Herebert, and Osbert de Clare, the Prior, settled the hermitage and lands upon three pious maidens, Emma, Gunhilda, and Cristina, who are said to have been maids of honour to Queen Matilda, or Maud, consort of Henry I. Eventually Godwyn himself was made master-warden and guardian of these ladies. The suppression of all religious houses under the yearly value of £200, in the 28th year of Henry VIII. (1536–7), put an end to the existence of Kilburn Priory, as such, or, as it was described

when surrendered to the commissioners—the "Nonnerie of Kilnborne."

Lambert, in his "History and Survey of London and its Environs" (1806), remarks: "There are now no remains of this building (*i.e.*, Kilburn Priory), but the site of it is very distinguishable in the Abbey Field, near the tea-drinking house called Kilburn Wells." This, says Walford, who quotes the above in "Old and New London," "it would appear, must have been as nearly as possible at the top of what is now St. George's Terrace, close to the Kilburn Station of the London and North-Western Railway, on its northern side; for when the railway was widened, about the year 1850, the labourers came upon the foundations of the Priory, and discovered tessellated tiles, some keys of Gothic pattern, and the clapper of a bell, together with human bones, denoting the presence of a cemetery." A contributor to *Notes and Queries* (3rd Series, vol. ix., 1866), describes the position of Kilburn Priory, which was small and unimposing, as standing "in the space between Priory Road and St. George's Road, and nearly behind No. 26 of the houses in the former locality. My informant," he continues, "now residing at Kilburn, was acquainted with an old lady, who died about 1845 at the age of eighty, who pointed out to him the place where the ruins of the Priory stood, and where, as a girl, she had played at hide-and-seek. The field was then denominated Abbey Field, and in its immediate vicinity there had been a burial-ground."

In his description of Kilburn Wells, Mr. Wroth ("London Pleasure Gardens") says that from the MS. history of Middlesex, quoted by Park, the spring

would appear to have been discovered about 1742; the date over the reservoir containing the waters was, however, 1714, and Walford (vol. v. p. 245) states that the spring was known before the end of the sixteenth century.

The Bell Tavern, dating from about 1600, generally known as "Kilburn Wells," was the house to which the holiday folk of London used to resort to drink the mineral waters. It had large gardens, and is referred to as a place in some respects like Sadler's Wells in a "Dialogue between a Master and his Servant," by Richard Owen Cambridge, published in 1752; the lines run:—

> "Shall you prolong the midnight ball
> With costly supper at Vaux Hall,
> And yet prohibit earlier suppers
> At *Kilburn*, Sadler's Wells, or Kuper's?"[1]

A Dr. Hales is the first author to describe the waters of these wells. "The Spring," he says, "rises about twelve feet below the surface, and is enclosed in a brick reservoir of about five feet in diameter, surmounted by a cupola. The keystone of the arch over the doorway bears the date 1714." The water was a mild purgative, milky in appearance, and had a bitterish taste, and was said to be more strongly impregnated with carbonic acid gas[2] than any other spring in England. It was also said to be specially prized by those who indulged in convivial potations.

An analysis of the water was made in 1792 by

[1] Cuper's Gardens, Lambeth; the water-entrance faced Somerset House.

[2] The carbon dioxide of modern chemists.

Dr. Bliss, and another in 1804 by Mr. Godfrey Schmeisser; the latter was published at the time in Vol. 82 of the Philosophical Transactions. These showed very different results, but in both the feature of note was the large proportion of magnesia present.

In its halcyon days Kilburn Wells enjoyed almost as large a share of popularity as did Highbury Barn or Cremorne in more recent times. A prospectus from the *Public Advertiser* of July 3, 1773, speaks of Kilburn Wells as a "happy spot equally celebrated for its rural situation, and the acknowledged efficacy of its waters, and being most delightfully located near the site of the famous Abbey of Kilburn, on the Edgware Road, at an easy distance, being a morning's walk from the centre of the metropolis, two miles from Oxford Street; the footway from Mary-bone across the fields still nearer." At this time the gardens were enlarged and improved and the house and offices repainted and beautified. The great room was said to be adapted to the use and amusement of the politest companies and fit either for music, dancing, or entertainments. The ballroom or Great Room, as represented in old engravings of the place, was in existence in the memory of persons living in the eighteen hundred and sixties. The old house to which the well and gardens were attached was taken down about 1863, and the present "Bell" public-house erected on the spot. The spring was in use certainly up to the year 1790, but not for medicinal purposes after about the first decade of the nineteenth century, but the "Old Bell," or "Kilburn Wells," as the place was generally denominated, enjoyed popularity as

a tea-garden as late as 1829. Dr. John Macpherson, the author of a work on the mineral waters of the British Islands, writing about the year 1871, says: "A recent visit to Kilburn induces me to think that its well has lost most of its salts." The waters were said to be strongly impregnated with carbonic acid gas (carbon dioxide).

The exact site of the well was at the back of the present buildings of the London and South-Western Bank, which stands at the corner of the High Road and Belsize Road. On the Bank building is a tablet stating that "On this site was situated the Kilburn Wells." A member of the Committee of the Kilburn Public Library, who has resided in the neighbourhood for many years, saw the actual well of mineral water, with the stone steps and the flat tiles, when the ground was being prepared for the Bank building, some ten or twelve years ago (about 1895). He concludes that the spring was cut off by the London and North-Western Railway Company about 1834. There seems to be no record of when the well ceased to be used as a medicinal water, but probably not after 1818.[1]

The best if not the only view extant of the conventual buildings is an etching executed in the year 1722, a copy of which is in Lysons' "Environs of London," vol. ii., Part III., 1795. It represents a small barn-like structure, supported by heavy buttresses, the only ecclesiastical feature about it being the pointed arch of the doorway.

[1] Partly derived from information kindly furnished by Mr. James A. Seymour, Librarian of the Kilburn Public Library (1907).

The following analyses of water from the Kilburn mineral spring are taken from Park's "Topography of Hampstead" (1814), pp. 65, 66. It will be noticed that they differ considerably :—

Analysis made by Dr. John Bliss in 1792.

	Grs. per Gal.
Oxyde of iron, not appreciable	
Carbonate of lime .	8·40
Carbonate of magnesia	10·75
Extractive matter .	3
Muriate of magnesia .	33
Muriate of lime . .	14·75
Muriate of soda .	18
Sulphate of soda .	117·50
Sulphate of magnesia .	265
Sulphate of lime .	42
Insoluble . . .	1·50
	513·90

Gaseous contents :

	Cubic In.
Carbonic acid gas .	18
Common air . .	5·5
Contents in a gallon .	23·5

Analysis made by Mr. Godfrey Schmeisser in 1804.[1]

	Grains.
Calyx of iron (Iron Oxide)	3⅛
Aerated calcareous earth (Calcium Carbonate) .	24
Aerated magnesia (Magnesium Carbonate) .	12½
Selenite (Hydrated calcium sulphate) . .	130
Muriated magnesia (Magnesium chloride) . .	128
Muriated calcareous earth (Calcium Chloride) .	6
Muriated natron (Sodium Chloride) . . .	60
Vitriolated natron (Sodium Sulphate) . .	282
Vitriolated magnesia (Magnesium Sulphate)	910
Resinous matter . .	6

Gaseous contents :

	Cubic In.
Hepatic air (Sulphuretted Hydrogen) .. (near)	36
Fixed air (Carbon Dioxide)	84
Contents in 24 lbs.	

[1] The modern terms inserted between the brackets in this analysis have been added for the sake of clearness.

CHAPTER VII

WEST LONDON GROUP OF WELLS AND SPAS

Marylebone Gardens and medicinal spring—Known as Marybone Spa—Mentioned in J. T. Smith's "Book for a Rainy Day"—Powis Wells in Lamb's Conduit Fields—Assemblies for dancing held in Long Room—Kensington Wells—St. Govor's Well—St. Agnes' Well of medicinal water—Frequented chiefly by the lower orders—Medicinal spring at Earl's Court mentioned by Faulkner.

MARYLEBONE Gardens, or, as commonly called, Marybone Gardens, were situated on the east side of the High Street, opposite to the old parish church of St. Mary-le-Bourne. They formed part of the garden belonging to the old Manor House, originally built in the reign of Henry VIII., which, during the time it was vested in the Crown, was occasionally used as a royal residence, particularly by Queen Elizabeth. The gardens were detached from the Manor House in 1650: the house, a Tudor building of some distinction, had been occupied as a boarding school from 1703 and was pulled down in 1791, and Devonshire Mews was built on the site. The whole extent of the original gardens was about 8 acres: this included a large bowling-green, stated in the *Gentleman's Magazine* for 1813 (Part i. p. 524) to

be 112 paces one way and 88 another. The ground covered by the gardens comprised the sites of Devonshire Place, and portions of Beaumont Street, Devonshire Street, and Upper Wimpole Street, extending as far eastward as Harley Street; the southern boundary was Weymouth Street—then called Bowling Green Lane.[1]

Pepys writes of these gardens in 1668 in his own quaint manner: "Then we abroad to Marrowbone, and there walked in the garden; the first time I ever was there, and a pretty place it is."

As a place of amusement of the Vauxhall type the gardens date practically from 1738, but the Marylebone garden and bowling-green came into existence at a much earlier period.

Mr. J. T. Smith's "Book for a Rainy Day" contains much curious information about the Marylebone Gardens, and details of the *fêtes*, balls, and concerts, which were held during the run of the season, are to be found in the papers of the day. When the gardens were in a flourishing state, selections from Handel's music were often played here under the direction of Dr. Arne, the singers and instrumentalists including some of the best performers of that time.

In 1755 was published an engraving, after a drawing made by J. Donnowell, representing these gardens, probably in their fullest splendour.[2] "The centre of this view exhibits the longest walk, with regular rows of young trees on either side, the stems of which received the irons for the lamps at about the height of

[1] "The Garden at Marylebone Park" (from Memoranda by Samuel Sainthill, 1659).

[2] Crace Catalogue, p. 566, No. 74.

seven feet from the ground. On either side of this walk were latticed alcoves ; on the right hand stood the bow-fronted orchestra, with balustrades supported by columns. Over this erection the roof was extended considerably to keep the musicians and singers free from rain. On the left hand of the walk was a room, possibly for balls and suppers. The figures in this view are well drawn and characteristic of the period."

In the winter of 1773–74, in the course of a search made under the direction of the City Surveyor for the City wells, a medicinal spring was discovered in the gardens. In the year 1774 the Managers of the gardens advertised and opened (June 6th) the Marybone Spa. The public were admitted to drink the water from six o'clock in the morning, when tea, coffee, and other refreshments were also obtainable. The waters were supposed to promote a healthy appetite and a good digestion, besides being considered highly useful in nervous, scorbutic, and other disorders.

The end of Marybone Gardens as an open-air resort was now not very long deferred. About 1778 the site of the gardens was let for building purposes and the formation of streets was begun. The present Marylebone Music Hall fronts the High Street, and stands on the site of the old Rose of Normandy [1] Tavern, from which the gardens were entered. The grounds were, however, opened again for a short time in 1794, a sort of last expiring flicker. Some of the trees, under which the company promenaded and

[1] The "Rose of Normandy" (with a skittle alley at the back) existed, little altered, till 1848–50, when a new tavern was built on its site.

listened to the strains of music, are still standing behind the houses in Upper Wimpole Street.

At a bazaar held in the Portman Rooms, Baker Street, in 1887 (November 22–26), for the benefit of the charities of Marylebone Church, an ingenious reproduction was devised, under the direction of Mr. Thomas Harris, the architect, of the latticed alcoves, lamp-hung trees, &c., of the old Marybone Gardens. An account of the representation is given in "A Booke of ye old Marybone Gardens," 1887 (sold at the Bazaar).

In Lamb's Conduit Fields, by the Foundling Hospital, and at the back of Powis House,[1] which stood near the north-west end of Great Ormond Street, was a small spring of mineral water called Powis Well, with a house of entertainment and pleasure walks, which were "much frequented on account of the water being good for several distempers, particularly for the eyes." The spring must have been discovered and in use some time before 1721, as may be inferred from the following reference to it. The *Weekly Journal* for January 17, 1721, records an accident occurring here by which a man was drowned: "Tuesday morning last happened a very odd and deplorable accident; a man going to a little spring at the back of Lord Powis's house, in Lamb's Conduit Fields, to which there is a great resort on account of its being reported good in several impurities; stooping to wash his eyes, as 'tis supposed, he fell headlong in and was suffocated." Another reference to the spring or well

[1] The first house was burnt down, 1714, and rebuilt the same or the next year. In 1777 this latter building was taken down.

occurs in a rare little book[1] called "Remarks on London," &c., &c., by W. Stow, printed in 1722, "for T. Norris at the 'Looking-glass,' and H. Tracy at the 'Three Bibles,' on London Bridge":—

"Ormond Street, by Queen's Square—Here is a stately Stone House, belonging to 'Squire Herbert, called Lord Powiss; and behind it is a well whose water is reckon'd Medicinal for sore Eyes."

An advertisement dated August 4, 1748 (the name of the newspaper does not appear) announces that—"The Long Room at Powis Wells by Lamb's Conduit will be opened for the Summer Season, with an assembly of Country Dancing. To begin on Monday next. Tickets to be had at the said Wells at two shilings each. The doors to be opened at four o'clock. There will be good Musick and good accommodations." Another advertisement (of 1754) is in these terms: "Powis Wells by the Foundling Hospital.—These waters are now in their full perfection. They are of a sweetening, diuritic, and gently purging quality, and are recommended by many eminent Physicians and Surgeons for the cure of breakings out, sore legs, inflammation of the eyes, and other scorbutic and leprous disorders, &c. Those who send for these waters are desired to take notice that the Bottles are sealed upon the cork with the words 'Powis Wells Water.'"

The wells are marked on Rocque's map.

Kensington could boast of several medicinal springs, with waters of more or less potency. Faulkner, in his "History of Kensington" (1820), says: "The first mention of the mineral spring and wells house,

[1] This reference was kindly furnished by Mr. Philip Norman.

which stood on the site of the present Notting Hill House, occurs in the year 1698." This house was the manor-house of Notting Hill, and was later renamed Aubrey House, perhaps from Aubrey de Vere, who was lord of the manor of Kensington in the eleventh century. Notting Hill forms part of Kensington parish and manor. The Rev. W. J. Loftie in his "Picturesque and Historical Kensington" (1888) describes the present house as having some old features about it. His book contains a view of the house and garden, which are shut in from observation by a high wall, and very little can be seen from Holland Walk, so that many people constantly pass the house and never know of its existence. It is bounded on the west by Holland Park, and on the north-east by some of the gardens of the "Dukeries." Before Faulkner's time the place was occupied by George de Vismes, and was celebrated for its chalybeate wells. There was some idea of establishing a Spa here. It was then—about 1838—the property of Sir Edward Pryce Lloyd, afterwards the first Baron Mostyn. The wells were under the successive proprietorships of Dr. Wright and partners in 1699, a Mr. Town in 1720, and in 1721 a Mr. Reid appears to have been in possession. The house (not the present one) and wells were for some years places of considerable public resort, but after the last-named year no further mention is made of them in the parish books. Bowack ("History of Middlesex," 1705) alludes to the springs as in great esteem in that year. Two wells are marked on Rocque's map (1746).

ST. GOVOR'S WELL, KENSINGTON GARDENS.

From an original photograph taken in 1910.

To face p. 171.

West London Group of Wells and Spas

The writer is indebted to Mr. W. Cleverley Alexander for kindly supplying the following particulars as to the position of the wells. He says: "When I took the house (*i.e.*, Aubrey House) thirty years ago (about 1874), there was a well under the west wing of the house, which had been built about a hundred years, and a second well at the east end of the house. Both were polluted, and I had them filled up." The springs contained Epsom or Glauber salts, like other aperient waters with which London was so amply supplied.

There were three other springs in the neighbourhood, two of which were, at the beginning of the nineteenth century, in Hyde Park. The third, in Kensington Gardens, is the only one now existing. It lies a little to the south of the Round Pond, not far from the Palace. It is called St. Govor's Well, from the name of a saint who founded a church in Monmouthshire, named Llanover, near Abergavenny. The name is said to have been given to the well in honour of the owner of the parish in Monmouthshire, Sir Benjamin Hall, created Lord Llanover. He was for three years—1855–58—First Commissioner of Public Works in London, and it may have been during his term of office that the well was in charge of an old woman who, for a trifling sum, supplied glassfuls of the water to wayfarers. Mr. Loftie[1] says the water of St. Govor's Well does not deserve the reputation it acquired for purity, as it is loaded with organic matter. The other well of medicinal water, called St. Agnes'

[1] "Kensington, Picturesque and Historical," W. J. Loftie, 1888.

Well, was near the east bank of the Serpentine at its head, a part which used to be called Buckden Hill, overlooking the waterworks, reservoirs, and fountain. Buck Hill Walk and Gate are reminders of a time when there was a deer paddock here. It must be the well of St. Agnes that Sir Richard Phillips describes in "Modern London" (1804–05): "In the north-west corner of Hyde Park, beneath a row of trees, running parallel with the keeper's garden, are two springs, greatly resorted to: one is a mineral and is drunk; the other is used to bathe weak eyes with. At the former, in fine weather, sits a woman, with a table and chair and glasses for the accommodation of visitors. People of fashion often go in their carriages to the entrance of this enclosure, which is more than a hundred yards from the first spring, and send their servants with jugs for the water, and sometimes send their children to drink at the spring. The brim of the further spring is frequently surrounded with persons, chiefly of the lower order, bathing their eyes. The water is constantly clear, from the vast quantity the spring casts up, and its continually running off by an outlet from a small square reservoir."

Faulkner[1] mentions a medicinal spring at Earl's Court as in his time still retaining the name of Billing's Well, after a former proprietor.

[1] "History and Antiquities of Kensington," Thomas Faulkner, 1820.

CHAPTER VIII

MINERAL SPRINGS AS REMEDIAL AGENTS

Thermal waters: their temperature, whence derived—The mineral matter they contain—British and foreign waters compared—Analysis in its application to mineral waters very imperfectly understood before the nineteenth century.

THE use of mineral springs as remedial agents for certain diseases, either in the form of draughts or of baths, goes back to a very early period. Remains of Roman work have been found at most of the European baths which are now in favour—at almost all the thermal ones. Some of the Greek sanctuaries of Æsculapius had healing thermæ, or springs, near them, and the physicians of that country had great faith in their curative power.[1] In "The Cities and Cemeteries of Etruria,"[2] Dennis mentions many sites of ancient hot baths, some still in use, notably the Bagni di Ferrata, three miles east of Cività Vecchia, the hot springs lauded by Rutilius under the name of Thermæ Tauri, and mentioned by Pliny as the "Aquenses cognomine Taurini," in his Catalogue of Roman Colonies in

[1] "The Home Life of the Ancient Greeks," Alice Zimmern, 1893, p. 242.

[2] Revised edition, 1878, vol. i. p. 299.

Etruria. "They are still," adds Mr. Dennis, "much resorted to by the citizens of Rome during the summer."

Luchon, the most frequented of the Pyrennean watering-places, has been the resort of invalids and "malades imaginaires" from the days when Roman emperors drank these waters and Fabia Festa paid her vow to the god Lixon (giving the name of Luchon to the little town built near the rocks, whence the healing waters flowed) to the present time.[1]

Occasionally new springs are discovered in new countries, but the majority of them have long been known. In London, the rediscovery of medicinal springs, the sites of which had been forgotten, is pointed out by modern writers as having taken place in some instances.

There is much in the observation of the elder Pliny in his "Natural History," that the quality of the constituents of mineral water depends upon the nature of the soil through which the water passes. Thus in limestone and chalk districts an excess of lime is usually present, and where iron abounds in the rock the water becomes to a greater or less extent impregnated with it. The natural warmth of the thermal springs was, in accordance with the tendency of the age, ascribed by the ancients to a special mystical power, and the effect of the waters upon the human body could only be imperfectly explained by the poorest chemical analysis. The source of the temperature of thermal waters remains a subject of much un-

[1] "The Pyrenees," Henry Blackburn, ed. 1881. Luchon, or Bagnères-de-Luchon (the Balneariæ Lixonienses of the Romans), department of Haute Garonne.

certainty: among the assigned causes are the internal heat of the globe, or the development of heat by chemical or electrical agencies in the strata through which they pass. Mineral springs, which are found in all quarters of the globe, are most abundant in volcanic regions, where many salts of soda and much carbonic acid are present. Hot water, it is well known, has a greater power of dissolving solids than cold water, consequently hot—thermal—springs are often largely permeated with mineral substances. The more important of these in a therapeutic sense are sodium, magnesium, and calcium compounds, sulphur, carbon dioxide, sulphuric acid, and iron. Mineral waters, in fact, consist of weaker or stronger solutions of salts and gases in water of higher or lower temperature, but the quantity of salts present commonly bears a very small proportion to that of the fluid containing them, though this proportion varies considerably. In common spring water the proportion of mineral matter held in solution may vary from 50 to 400 or 500 parts in every million parts, but in districts where water is "hard" the proportion may rise to 2,000 parts in every million. In mineral springs the proportion is of course very much greater. Thus, in the Vichy waters the solid contents are more than 5,000 to every million, those of Püllna, in Bohemia, more than six times the latter amount.

The analysis of mineral waters is only a product of the nineteenth century. In the sixteenth century physicians began to evaporate mineral waters and to try other experiments to discover their qualities, and to procure the solid bodies they contained, but the progress of their researches was very slow till, in

the seventeenth century, societies for the advancement of natural knowledge were established in London, Paris, and other places in Europe. Excepting as a rough-and-ready note of the ingredients, the early analyses are quite unreliable, analytical chemistry being then very imperfectly understood. Analysis in the present sense of the word, *i.e.*, a true qualitative and quantitative determination of the ingredients dissolved in various waters, and of the gases contained in them, did not exist before the third decade of the nineteenth century, and was first established by Berzelius and Struve.

Of the English sulphated or bitter waters, containing sulphates of sodium and magnesium, those near London, of Kilburn, Barnet, Northaw, Sydenham, Beulah, and Streatham, were all at one time (chiefly in the last half of the seventeenth and first half of the eighteenth centuries) much employed, those of Streatham until quite recently; in the eighteen hundred and fifties they were sold in London in large pitchers containing three or four quarts, and even now there is a limited sale for them.[1] In Charles II.'s reign such waters were, we learn, taken at the wells early in the morning, as laxative saline waters are now taken at foreign spas. The English purging waters were in old times usually either drunk warm or mixed with milk or made into possets. Amongst the iron or chalybeate springs near London, the following were well known: Dulwich; Hampstead; Shadwell; a spring near the Tower of London; Sadler's Wells, Islington Spa, or the New Tunbridge Wells, both at Islington; Hoxton, and Bermondsey. All wells

[1] Julius Braun, "Handbook to the Spas of Europe," 1875.

having the least taste of iron perceptible in them have been called chalybeates. Iron usually exists in waters in the state of the protoxide, or carbonate, less frequently in that of the sulphate, and very rarely, if at all, in that of the chloride. The quantity of iron present is usually extremely small, varying from ·12 to ·03 in the 1,000 parts of water. Some wells considered distinct chalybeates contain even less than the latter proportion. Iron waters are scarcely ever thermal. They are extremely common in all countries, and frequently contain sulphuretted hydrogen, which occurs in solution in bogs. They are also common near coal-measures.

It is often lamented that this country is flooded with importations of German and other Continental waters, both for medicinal and table use, to the neglect and exclusion of our native waters. The answer to this is that British waters are by no means neglected; those of them which can be classified in point of efficiency with their foreign counterparts have an ample home patronage. Of the earthy mineral waters, those of Bath may be classed with Baden and Contréxéville, as the best-known springs of that type. Among the stronger of the saline waters, used for bathing, Droitwich, Saratoga, and Nauheim may be grouped together. Iron salts are present in the waters of Spa, Pyrmont, St. Moritz, Tunbridge Wells, and Homburg. Harrogate is the most celebrated for its sulphur wells, of which it possesses very strong and very weak ones; it can be named with Aix-la-Chapelle, Baden, and Aix-les-Bains.

The purgative waters of this country are, however, not to be compared for strength with those of Fried-

richshall, Ofen (Buda), Kissengen, and other springs of this class on the Continent, unless the waters of Woodhall Spa, in Lincolnshire, be excepted.

It should be borne in mind that a course of mineral waters is largely dependent for its success on the important concomitants of a complete change of environment, climate, diet, and simplicity in the mode of living, and that these changes contribute greatly to the cure for which the water often gets the sole credit. Without a thorough change for the time being in the habits and manner of living, and strict attention to the regimen of the health resort, it is impossible to obtain the full measure of benefit.

London was abundantly supplied with aperient waters, but in all cases it was necessary to drink them in large quantities—the system had to be drenched with them—and this may be a reason for their having been given up. Those near London were necessarily disused when the neighbourhood became built over, and when they could no longer be looked upon as situated in the country, and consequently could not provide the change of air and scene offered by more distant spas, such as Cheltenham and Leamington, which sprang up and eclipsed the popularity of those near the metropolis.

PART II

STREAMS AND SPAS SOUTH OF THE THAMES

CHAPTER I

THE EFFRA, FALCON BROOK, AND NECKINGER

South London : physical features—Effra River—John Aubrey makes no mention of it—Brayley's allusion to it—Tracing of its entire course—Branch of the Effra near Kennington Church—Another arm of the Effra—Falcon Brook—The Neckinger Stream : its rise and course—Navigable for small craft—Tanneries and mills on its banks—St. Saviour's Dock.

IN taking up a relief map of South London one cannot fail to note the great expanse of marsh land, the river-flat, which extends from the clay valley of the Beverley Brook on the west to the Ravensbourne on the east, a distance of about ten miles, by a width varying from about one and a half to four miles. Except for the slightly higher gravel of Wandsworth Common, there is no rising ground until the gentle ascent, the beginning of the Surrey hills which can be observed from the high roads of Clapham, Brixton, and Camberwell.

The first chapter of Besant's "South London" (1899) contains a striking word-picture of the condition of this great tidal marsh in early times, long ages before any attempt had been made to reclaim it by drainage and other modern means. No cliffs on this side overhung the river as on its northern side, on

which the earliest London (pre-Roman) subsequently rose. Like most swampy places, it was the home of many water-plants, of which, in later times, Gerarde in his "Herball" (1597) mentions that the hedgehog grass grew in wet ditches close to Paris Garden Bridge and in St. George's Fields, and that the frog-bit (*hydrocharis morsus-ranæ*) might be found floating in almost every pool; he speaks too of the crowfoot in the lakes and slowly-running or standing waters. At low tide numerous streams might be seen crossing this marsh on their way into the Thames, though when the tide was up their beds became indistinguishable among the shallows. Among the larger of these streams—to use the names by which they were afterwards known—were the Wandle, the Falcon, the Effra, the Neckinger, and the Ravensbourne, besides others which have disappeared and left no name. The first and last mentioned still exist above-ground, but the Effra, Falcon Brook, and Neckinger are no longer visible, except that the mouth of the latter forms a small dock, called St. Saviour's Dock, at Bermondsey.

The Effra is an interesting stream because, until within the last fifty years or so, it ran, an open, clear, and sparkling brook, over a gravelly bottom through the Dulwich fields, and supplied fresh water to the neighbourhood. The bed of part of its course could be seen a few years ago, though only for some half-mile of its windings, and these through a valley not then handed over to the builder.

A few words as to its past: there were traditions that King Cnut with his fleet sailed up the Effra as far as Brixton, for the Effra was to South London

what the Fleet was to the north—a brook winding among the fields at the foot of the low Surrey hills. Aubrey, in his "Natural History and Antiquities of Surrey" (commenced 1673), has no reference to the Effra. Brayley,[1] speaking of Kennington Churchyard, says: "On the south side is a small stream called Effra, over which was a bridge that was repaired by the Canons of Merton Abbey, to whom lands had been devised for the purpose. This rivulet takes its rise in the upper part of the Brixton District [this is wrong, as it really rose in the hills of Norwood], and flowing along the eastern side of the highway, has been partly arched over, for the convenience of access to the new ranges of houses that have been built there." Again he alludes to it in speaking of Claylands, an estate near the Kennington Oval, saying: "Claylands is bounded on the north by the Effra." Unfortunately, in trying to trace its course from maps, there is not much help to be got. On Rocque's map there is a stream, apparently intended for the Effra, but which is named "The Shore." In a map of 1753,[2] it is shown falling into the Thames a little to the eastward of Vauxhall Bridge.

An old inhabitant of Stockwell, who could look back some fifty years with a fresh memory, sometime in the year 1891 traversed the ground through which the Effra formerly flowed, in company with a representative of the *South London Press*. Parts of his

[1] "History of Surrey," vol, iii. pp. 362–3; date of vol. i., 1841.

[2] This map is reproduced by the Rev. H. H. Montgomery, "History of Kennington," 1889.

description of its course are here embodied. To speak of the Effra as a river, he confessed, was an extravagance, for in point of fact the "river" partook more of the character of a moderately capacious stream, consisting mainly of the surface water arising in the higher ground of Norwood and the then agricultural neighbourhood of Brockwell and Herne Hill. The Effra was, at all events, a troublesome stream in the lower levels of Stockwell and Kennington, for a downfall of rain, even of a moderate character, would flood the basements of the houses hereabouts.

As to the course taken by the stream after running by the side of Croxted Lane, Dulwich, there is clear evidence of the former existence of the Effra from Norwood Road, which adjoins Half Moon Lane; but here for the nonce all traces of the stream are eliminated. There was a very pronounced bend between the point now occupied by the railway bridge (at Herne Hill Station) and the entrance of Dulwich Road, when the Effra pursued a straight course for half a mile or so, skirting the park of Brockwell House on its north-east side. Near the bottom of the slope of Brockwell Park, along the Norwood Road side, there can, or could recently, be seen the bed of a streamlet that ran into the Effra just opposite to where the park gates now are. This accounts for the valley along which the tramway to Norwood now runs.

A lady writing from No. 32, Tulse Hill, in August, 1891, to a local newspaper, said the Effra once flowed at the foot of the garden of that house, and that its banks might be traced for some little distance in the new road (Leander Road) leading out of Josephine Avenue, Water Lane.

The Effra, Falcon Brook, and Neckinger

Coming to the Brixton end of the Dulwich Road its course is more difficult to define, but it is clear that it meandered through Rush Common, which was between Dulwich and Coldharbour Lane, and took its course in the direction of Saltoun Road. Eventually it emerged at the point now occupied by the Atlantic Road, near Brixton Station, and then striking across in the direction of Pope's Road, it entered the Brixton Road at the corner of Canterbury Road. Here it became larger—its average size in the main road was about 12 feet wide and 6 feet deep. Its course was through the forecourts of the houses on the Camberwell, or east, side of the thoroughfare, access to the houses being gained by little bridges. On reaching St. Mark's Church, Kennington, it took an abrupt turn, crossed Clapham Road, and passing along the south side of the Oval, emerged at Vauxhall, where it passed under a bridge called Cox's Bridge, falling into the Thames a little to the eastward of Vauxhall Bridge.

A branch of the Effra parted from the main stream just before Kennington Church was reached, and bending in a northerly direction towards the South Lambeth Road, flowed along the lane leading by the side of the present Vauxhall Park to the Crown Building Works of Messrs. Higgs and Hill, at the corner of Lawn Lane, turning almost at right angles up the South Lambeth Road towards Vauxhall Cross. Another arm of the Effra forms a piece of ornamental water in the grounds of "Belair,"[1] one of the noted *maisons grandes* of Dulwich, in the Gallery Road.

[1] Built by Adams (of Adelphi fame) in 1780.

The Effra Road, from Water Lane to the Brixton Road, serves to keep the name in remembrance.

The Falcon Brook, another vanished London river, rising on the south side of Balham Hill, flowed almost due north between Clapham and Wandsworth Common to Battersea Rise, which it crossed. Turning abruptly to the west, it ran along Lavender Road, crossed the York Road, and discharged itself into the Thames by Battersea Creek, which is all that now remains of the little river, except the underground sewer which passes along its former course. Its name is preserved in the Falcon Road, leading, by Ingrave Street, to the Creek, and in a modern public-house, which supplanted the original "Falcon," a somewhat rustic building which harmonised well with its surroundings, which were of quite a rural character.

"In the last quarter of the eighteenth century," writes Robert Chambers, in his "Book of Days," "there flourished at the corner of the lane leading from the Wandsworth Road to Battersea Bridge a tavern yclept 'The Falcon,' kept by one Robert Death—a man whose figure is said to have ill comported with his name, seeing that it displayed the highest appearance of jollity and good condition." But Mr. Death has long since submitted to his mighty namesake; "The Falcon" is gone, and the very place can scarcely be distinguished among the spreading streets which now occupy these parts.

The waterside division of Bermondsey, or that part of the parish situate east of St. Saviour's Dock, and adjoining the parish of Rotherhithe, is intersected by

several streams or watercourses. One of these—the Neckinger (or Neckenger)—rose at the foot of Denmark Hill and adjacent parts, and after passing in two streams under the Old Kent Road, united north of it, and reached the Thames at St. Saviour's Dock, which, in fact, is the enlarged mouth of the old river. Besides the bridge which spanned it at the Grange Farm, there was another where it crossed the Old Kent Road, near the spot where the Albany Road joins the latter road. This bridge was known as Thomas-a-Watering, from St. Thomas, the patron of the dissolved monastery, or hospital, of that name in Southwark. It was the most southern point of the boundary of the Borough of Southwark, and in ancient days the first halting-place out of London on the road into Kent. Chaucer's pilgrims passed it on their way to the shrine of St. Thomas à Becket at Canterbury:

> "And forth we riden, a litel moore then paas,
> Unto the wateryng of Seint Thomas,
> And there our Hoost bigan his hors areste." [1]

The Neckinger was formerly navigable for small craft from the Thames to the precincts of Bermondsey Abbey, and gives name to the Neckinger Road, which is at a short distance southward of Jacob's Island [2] (a

[1] Prologue to "Canterbury Tales."

[2] "London," Chas. Knight, 1842, vol. iii. p. 20. Here is a short account of the "Island": "Jacob's Island—formed by a stream, about 20 feet wide, which entirely encircles a cluster of mean and dilapidated houses, to which access is gained by about a dozen wooden bridges from the 'terra firma' on the other side of the stream. This stream is bounded on the four sides by Mill Street, Bermondsey Wall, Nutkin's Court, and

spot rendered familiar in the pages of one of Dickens's most popular works, "Oliver Twist"), and connecting Abbey Street with the Spa Road. When the abbey was destroyed, and the ground passed into the possession of others, the houses which were built on the site still received a supply of water from this watercourse. In process of time tanneries were established here, most probably on account of the supply of fresh water obtainable every twelve hours from the river.

"There appears reason to believe," says Charles Knight,[1] in his "London," "that the Neckinger was by degrees made to supply other ditches, or small watercourses, cut in different directions, and placed in communication with it; for, provided they were all nearly on a level, each high tide would as easily fill half a dozen as a single one. Had there been no mill at the mouth of the channel the supply might have gone on continuously; but the mill continued to be moved by the stream, and to be held by parties who neither had nor felt any interest in the affairs of the Neckinger manufacturers. Disagreements thence arose, and towards the end of the last century (eighteenth) the tanners of the central parts of Bermondsey instituted a suit against the owner of the mill for shutting off the tide when it suited his own purpose so to do, to the detriment of the leather manufacturers. The ancient usages of the district were brought forward in evidence, and the result was that the right of the inhabitants to a supply of water from the river,

London Street, and from the east end of the latter 'Jacob's Island' can best be seen. The ditch becomes filled with water at every high tide."

[1] "London," Chas. Knight, 1842, vol. iii. pp. 20 and 21.

at every high tide, was confirmed, to the discomfiture of the mill-owner. Many of the largest establishments in Bermondsey were for years dependent on the tide-stream for the water required in the manufacture of leather. Other manufacturers, however, constructed artesian wells on their premises, while the mill at the mouth of the stream was worked by steam-power, so that the channel itself became much less important than in former times. Latterly this ditch, or 'tide-stream,' as it was sometimes called, was under the management of commissioners, consisting of the principal manufacturers, who were empowered to levy a small rate for its maintenance and repair."

In "Inns of Old Southwark" (Rendle and Norman, 1888) it is suggested that Neckenger was probably a place of execution, for the prior and monks of Bermondsey had extensive rights under their charters, among the rest Infangthef—the right to catch, judge, and punish a thief caught in their manor, and the punishment was most commonly the gallows. The spot afterwards known as the Devil's Neckenger had been of old the place of execution for the manor of Bermondsey. The "Devol's Neckenger" is shown on a map of 1740.[1]

[1] Neckenger (the corrupt form of Neckercher) is an old word for a cravat, neck-cloth, or any other covering for the neck. Neckenger as a place of execution may possibly contain a grim allusion to the rope round the neck of a malefactor.

CHAPTER II

SOUTH LONDON SPAS AND WELLS

Bermondsey Spa—Opened by an artist, Thomas Keyse—Mr. William Herbert, one of the singers engaged here; he afterwards became first librarian of the Guildhall Library—Gallery of Paintings by Keyse—Picture-model of siege of Gibraltar—Lambeth Wells—Dancing and musical entertainments—Water esteemed serviceable in disorders of the eyes—"Dog and Duck," otherwise St. George's Spa—Its career under Hedger—Old stone sign of the inn let into wall of Bethlehem Hospital—Ladywell—Two wells here: one medicinal—Coping-stones preserved and form the rim of a drinking fountain at the Ladywell Public Baths—Shooter's Hill—Its height and structure—John Evelyn drinks the waters of the mineral spring here—Dipping Well on the top of the hill.

TRAVELLERS by the Greenwich Railway are familiar with a station called Spa Road, in Bermondsey, but probably few of them could tell how it came by that name. About 600 yards east of the station, where the Grange Road intersects the Spa Road, a chalybeate spring was discovered about the year 1770, either in the grounds of the Waterman's Arms Tavern, or on some waste land adjoining, for at that time there were open fields stretching away to the Kent Road. The premises having become vacant were purchased

about 1765, along with some grounds adjoining, by an artist, Mr. Thomas Keyse, who opened them as a place for tea-drinking. The spring, probably a weak chalybeate, may have helped to increase the attractions of the gardens, though the services of the proverbial physician seem not to have been invoked, and no analysis of the water appears to be on record. In fact Bermondsey was never a Spa, except in name, and it is probable that Keyse was not long in recognising this. In 1784 he obtained a licence from the Surrey magistrates for musical entertainments, after the manner of Vauxhall, and these, with an expenditure of £4,000 on decorations, brought his place into considerable popularity. He had also secured the services of Jonas Blewitt, a distinguished organist of the latter half of the eighteenth century, who composed the music of many songs for the entertainments at the Spa. One of the singers engaged by Keyse for his concerts, in the season of 1788, was a Mr. William Herbert,[1] who has left a few impressions of the Spa in the Memoirs of his life (preserved in the Guildhall Library). The gardens, he says, "were spacious—more so in some respects even than Vauxhall—there was a fine band; and what was wanting at Vauxhall, a large field at the back, parted from the gardens by a canal (Neckinger?) and *chevaux-de-frise*." There were the usual arbours and benches for tea-drinking, and on the

[1] After a somewhat chequered career, during which he kept a bookseller's shop, perhaps discovering thereby what was his real bent, Mr. Herbert had the distinction of being elected in 1828 the first librarian of the Guildhall Library, and this post he continued to fill until his retirement in 1845.

north-east side of the gardens was a lawn of about 3 acres. An occasional display of fireworks took place, and the gardens and a cascade (introduced about 1792) were illuminated.

The permanent indoor attraction was the Gallery of Paintings, the pictures all executed by Keyse, who, from 1765–68, was an occasional exhibitor at the Society of Artists. The subjects were taken from still life, chiefly representations of shop interiors, one of a butcher's shop and another of a greengrocer's shop being particularly remarkable for their close imitation of nature. They were painted, in short, with all the minuteness of the Dutch School, and though not of a high order, yet, regarded as the work of a self-taught artist, possessed uncommon merit. Sir Joshua Reynolds paid him two visits. Admission to the gardens was gained by the purchase of a check in copper or lead, for a shilling, half the value being allowed in wine. On special occasions the admission was half a crown or three shillings. Perhaps the waters were not entirely neglected, but of these nothing is said; the proprietor apparently found his entertainments sufficiently lucrative without pressing their sale. He was for some time successful; a clever picture-model of the siege of Gibraltar, the height of the "Rock" 50 feet and its length 200 feet, in fire-works and transparencies, occupying a large space of ground, designed by Keyse himself, is mentioned in accounts of the place. Pony races were run in the grounds. The *Picture of London* for 1802 mentions in the "Almanack of Pleasures" under July 17, "A silver cup run for at Spa Gardens, Bermondsey, by gentlemen's ponies." Mr. J. T. Smith, in his

"Book for a Rainy Day," relates how he paid a visit to the Spa in the year 1795, when he was personally conducted round it by Keyse, who, Smith says, was in person "a little thick-set man, with a round face, arch look, closely curled wig surmounted by a small three-cornered hat, put knowingly on one side, not unlike Hogarth's head in his print of the Gates of Calais." At the time of Smith's visit the once-famed resort was on the decline, and only remained open for about five years after the death of Keyse on February 8, 1800. His successors in the management failed to make it pay, and it was closed about 1804 or 1805. The house in which Keyse lived and died was a large wooden-fronted building, consisting of square divisions in imitation of scantlings of stone. There are a few tokens of the place extant (about the size of a halfpenny) [1] and the name and site are kept in remembrance by the Spa Road.

In the reign of William III. an announcement appeared in the *London Gazette* of April 27–30, 1696, which ran thus: "Lambeth purging waters in Langton Gardens, Lambeth Fields, near the 'Three Coneys,' will be opened to-morrow. The place is extremely pleasant and fitted for the entertainment of persons of all Qualities. On Tuesdays, Wednesdays and Fridays the musick will be continued till four after noon, and the other days till seven. To

[1] These were of extremely coarse workmanship; probably used as tickets of admission: Obv. Two Keys, and between them T.K. in monogram. Legend, BERMONDSEY SPA GARDENS. Rev. A group of musical instruments, and in the centre a flaming heart. 1789.

prevent mistakes, on the top of the House which covers the Well is a Golden Ball." One cannot in the absence of other data be quite certain that this was the first public announcement of the opening of Lambeth Wells; it reads rather as if it were not—the more so as such places usually began by merely supplying the waters; the entertainments came afterwards. The wells consisted of two springs, distinguished as the Nearer and Farther Well, and were situated in Three Coney Walk, now called Lambeth Walk. The water was supplied to St. Thomas's Hospital and elsewhere at a penny per quart; to the poor it was free. The usual price of admission was threepence, including the music. From an advertisement in the *Postman* of March 28, 1700, we learn that the season for drinking the waters began that year on Easter Monday. Another advertisement, appearing in the *Daily Courant* for March 8, 1721, announces " a Consort of very good music, with French and Country dancing. . . . Note—There will be attendance given every morning to any Gentlemen or Ladies that have occasion to drink the waters."

These " Consorts " underwent further development when a Mr. Ireland (successor to one Keeffe), became proprietor, after about 1740, in whose time a musical society was formed and met here monthly under the leadership of Mr. Sterling Goodwin, organist of St. Saviour's, Southwark.[1] The wells remained in some degree of credit till about 1736, when they met with a rival in those of St. George's Spa on the borders of the parish. We incidentally

[1] J. Nichols, " History and Antiquities of Lambeth," 1786, p. 65.

learn that there were grand gala days at Lambeth Wells in 1747, and in the year 1752 was celebrated a penny wedding, for the benefit of a young couple. A few years after this the wells gradually declined, and the place at length became a public nuisance, the proprietor was refused a licence, and the premises were let as a Methodist Meeting House. Bray, in his continuation of Manning's "History of Surrey" (1814), says the place had become a common ale-house by the name of "The Well." The wells themselves, though long closed to the public, were existing in 1829, in which year a public-house, the sign of the "Fountain," in Lambeth Walk, formerly the house of entertainment attached to them, was taken down. In digging for the erection of another public-house on the same site, many glass bottles or flagons of peculiar shape were found with the initials "P.K." on them—of Keeffe, a former proprietor of the wells.

In the same parish (of Lambeth), on the side of the road from Vauxhall turnpike to Wandsworth, on the right hand, was a spring called Vauxhall Well. The water was esteemed highly serviceable in many disorders of the eyes. In the hardest winters it never froze.

Within half a mile of Lambeth Wells in a north-easterly direction was a small public-house called the "Dog and Duck," which had existed as early as 1642. It stood on the outskirts of St. George's Fields, named after the Church of St. George the Martyr. These "Fields," marked by all the floral beauty of meadows, and as yet unsullied by London smoke,

had, some fifty years earlier, attracted Gerarde, who came here to collect specimens for his "Herball." "Of water-violets," he says, "I have not found such plenty in any one place as the water ditches adjoining St. George his fielde neare London." An entry in Evelyn's Diary tells us how in September, 1666, many of the unfortunate victims of the Great Fire retreated to these fields with such of their goods and chattels as they were able to save from the flames. Considering that these broad meadow tracts, including Lambeth Marsh, lying between them and the Thames, were formerly in winter, and indeed at every high tide, almost covered with water, it is not surprising that ponds were abundant. Near a group of these, and the "Dog and Duck" grounds, in which the sport of duck-hunting was carried on, were mineral springs of an aperient quality, known as early as 1695. Dr. John Fothergill, an "eminent physician," tells us that this water had gained a reputation for the cure of most cutaneous disorders, and was useful for keeping the body cool, and preventing cancerous affections. About the year 1731 the water was advertised for sale, when the "Dog and Duck" adopted the rather high-sounding title of "St. George's Spa." At this period the water was sold on the spot for fourpence a gallon. A dozen bottles could be had at the Spa (*circa* 1733–36) for one shilling. From about 1754 till 1770 the water was in considerable demand, and new buildings, including a Long Room with tables and benches and an organ,[1] appear

[1] Organs were first introduced into taverns during the Commonwealth period, when their use in Divine Service was for the time being abolished.

to have been erected for the accommodation of visitors, among whom were not wanting persons of good social position. Dr. Johnson, in a letter of July 10, 1771, advised Mrs. Thrale to take the waters here. From this date to near the end of the century they continued to be advertised in the newspapers. The following advertisement appears in the *Times* of May 26, 1795: "'Dog and Duck' Spa and Bath, St. George's Fields.—J. Hedger respectfully informs the Public the Gardens of the above Spa are open for the reception of those who wish to drink the waters on the spot, at the usual terms of 3d. each person," &c.[1]

The following extract from a MS. of 1826 by Hone, the author of the "Year Book," is printed *in extenso* by Larwood and Hotten:[2] "It (the 'Dog and Duck') was a very small public-house till Hedger's mother took it; she had been a barmaid to a tavern-keeper in London. Her son joined her, and the house —as a tavern—seems to have done a very thriving business, for when Hedger left it to his nephew, one Miles, the latter was to make him an allowance of £1,000 a year out of the profits; and it was he who allowed the house to acquire so bad a character that the licence was taken away. I have this," says Hone, "from William Nelson, who was servant to Mrs. Hedger, and remembers the house before he (Miles) had it," adding—"Hedger, I am told, was the first person who sold the water." In 1787 the "Dog and Duck" became the haunt of disreputable characters, the consequence being that the magistrates of Surrey,

[1] "Old Times," John Ashton, 1885.
[2] "History of Signboards" (1866).

when Hedger applied to have his licence renewed, refused; the Lord Mayor overruled this at a court he held in Southwark, and granted one conditionally upon the place being closed on Sundays. After a long existence, during which it frequently figured in connection with trials for highway robbery and other crimes, it was suppressed by order of the magistrates. The house was pulled down in 1811 for the building of the present Bethlehem Hospital, and the exact site of the well is no longer known. The old stone sign of the inn is still preserved, embedded in the brick wall of the Hospital garden, visible from the road, and representing a dog holding a duck in its mouth, and in a separate panel the arms of the Bridge House Estate and the date 1716. The position of the tablet is close to the actual site of the once notorious "Dog and Duck."

Several views of the exterior of the "Dog and Duck" exist. Wroth mentions the following:[1]—

The "Dog and Duck Tavern" copied from an old drawing 1646, water colour drawing by T. H. Shepherd, Crace Collection, Cat., p. 646, No. 27.

The "Dog and Duck" in 1772. A print published in that year. Crace Collection, Cat., p. 646, No. 28.

Woodcut of exterior, 1780, in Chambers's "Book of Days," ii. 74.

Interior of the Assembly Room, a stipple engraving, 1789, reproduced by Rendle and Norman in "Inns of Old Southwark," p. 369. This shows the company moving about in the centre of the room, which is lighted by large chandeliers; the organ is

[1] "London Pleasure Gardens of the Eighteenth Century," p. 277.

INTERIOR OF THE "DOG AND DUCK" (1789).

From an engraving in the Guildhall Library.

LIBRARIES

at the far end, and ranged along the walls on either side are tables for tea-drinking, at which some of the guests are sitting.

The discovery of the coping-stones of the old Lady Well was made about 1880, in digging to underpin an arch of the bridge over the Mid Kent Railway at Ladywell, where there had been a settlement of the ground. The stones were rescued from destruction by a signalman in the Company's employ, and in 1896 were re-erected and now form part of a fountain in the grounds of the Ladywell Public Baths.

The bringing to light of these stones led to a controversy as to which of two springs—one a medicinal spring—was the true Lady Well, and this was carried on in the *Kentish Mercury* for some time during the year 1896.[1] The correspondence is summarised in a paper published by the *Home Counties Magazine* (vol. i., 1899), by Mr. C. A. Bradford, who here records probably all that is known on the subject. The first mention of any spring in the parish of which, he says, he can find any trace, is in Warkworth's "Chronicles," edited by J. O. Halliwell for the Camden Society in 1839. Speaking of the hot summer in the 13th year of King Edward IV.'s reign (1472), Warkworth[2] says: "Also in the same year . . . water ran hugely, with such abundance that never man saw it run so

[1] See the *Kentish Mercury* for June 12, 1896.

[2] John Warkworth, Bachelor of Divinity, the reputed author of a Chronicle of Edward IV.'s time, was a man of unknown origin. He was appointed Master of the College of Peterhouse, Cambridge, in 1473, and remained its head till his death in 1500. (Dictionary of National Biography.)

much afore this time . . . also as they saw this water run they knew well it was a token of dearth or of pestilence or of (a) great battle. Also there has run divers such other waters that betoken the likewise; one at Levesham (Lewisham) in Kent." Warkworth is quoted by Leland in his "Collectanea,"[1] by Kilburne in his Survey,[2] by Hasted,[3] as well as by recent authors. The well is not mentioned in Lewisham parish registers till towards the close of the eighteenth century. Lysons, writing in 1811,[4] evidently refers to the mineral spring when he says: "Between Lewisham and Brockley is a well of the same quality as those at Tonbridge (*i.e.*, chalybeate); a woman attends to serve the water, which is delivered gratis to the inhabitants of the parish."

In Knight's "Journey Book of England"[5] (Kent, p. 58, 1842), the author confuses the Lady Well with the mineral spring when, in describing the Ravensbourne, he says: "At Catford Bridge, near Rushey Green, it receives into its channel the small river Chiffinch, and after crossing Brockley Lane, the waters from the Lady Well also, which is supposed to be the Great Spring mentioned by Kilburne as newly breaking out of the earth in 1472."

Butt's "Historical Guide to Lewisham," published in 1878, is the most explicit as to its position in the

[1] Vol. iii. part 2, p. 508, written before 1550.

[2] "A Topographie or Survey of the County of Kent," by Richard Kilburne, 1659, p. 168.

[3] "History of Kent," 1778.

[4] "Environs of London," vol. ii. p. 572.

[5] "The Journey Book of England," Chas. Knight and Co., 1842. Kensington Public Library.

following passage (page 21): "Crossing the bridge and exactly in front of the Freemason's Arms Inn we have the site of the Lady Well. The old well was opposite Ladywell House, and in (what is now) nearly the centre of the road leading to the Railway Station (opened in 1857) and just by the railway arch. It had a railing of iron round it, was 6 or 7 feet deep, with a small grating at the bottom, where the spring rose, which used to fill the well and flow over. This well was filled up and covered over some years ago when a sewer was made just there." The guide-book then goes on to speak of the mineral well "situated by the left (south) side of the road at Ladywell Cottage, before the cemetery is reached." It adds: "Mrs. Beak, the present tenant of Lord Dartmouth, informs me that this well was situated in the garden above her Cottage; that it was run dry by the making of the same sewer[1] which was fatal to the old Lady Well, somewhat more than eleven years ago (about 1865 or 1866); that a previous tenant named Stiles dismantled it, and sold the bottom stone. The well was railed round, and the spring reached by descending several steps. Her husband, on taking the cottage about 1868, found everything in disorder and the well destroyed. The water was noted for its benefit to weak eyes, and a lady, now residing at Norwood, told the present tenant that she, when a girl, came every day to drink of the water for the benefit of her health."

Mr. Bradford concludes his article by remarking that "it seems certain the name Ladywell is of

[1] Penge and Bell Green Sewers. (See *Kentish Mercury*, January 12, 1866.)

comparatively modern origin, neither name nor well being marked on Rocque's Survey (1745), nor on Hasted's map of the hundred of Blackheath (1778), whilst the Ordnance Survey Department, though admitting that a well is marked on the earliest Ordnance Survey Map of 1799, assert that the name of Ladywell first appeared on the MS. one-inch Ordnance Survey Map of 1841.

Both the place-name—Ladywell—and the well itself are marked on Crutchley's Map of London and its Environs (1831), the well being situated a little to the westward of the Ravensbourne, on the south side of Brockley Lane, which was afterwards crossed at this spot by the railway bridge.

The arguments as to the identity of the well which gave its name to the place left the issue undecided, the disputants being about equally divided.

The view of the Lady Well which illustrates Mr. Bradford's paper is put down by him as published approximately in 1820. He believes it to be the only copy extant of the earliest known representation of the well. It is shown in the picture, which is taken from a lithograph, as lying on the right of the foreground, its circular basin slightly raised above the level of the road. In the background is the tower of St. Mary's, the parish church of Lewisham.[1] A view taken some twenty years later is contained in Knight's "Journey Book," and shows the well-head of circular stones protected by an iron railing supported on five wooden posts, one side open to

[1] The old parish church was taken down in 1774, and the present church erected on its site.

A. S. Foord fecit.

THE OLD LADY WELL, 1842.

Kensington Public Library.

A. S. Foord fecit.

FOUNTAIN AT LADYWELL BATHS.

Containing the coping-stones of the old well.

To face p. 203.

afford access to the water. The background is filled up with a fence and trees behind it.

The sketch of the fountain is taken from a photograph belonging to Mr. Watson, the superintendent of the Ladywell Public Baths, and was lent by him to Mr. Graham, chief librarian of the Lewisham Central Library, who kindly forwarded it to the writer, and who was instrumental in procuring much of the information regarding the Lady Well history and associations contained in the foregoing description.

The large spur of London Clay known as Shooter's Hill is one of the most prominent objects of the landscape in the south-eastern district of London, and is in marked contrast with the broad alluvial flats stretching along the valley of the Thames at its base. The hill rises up on all sides to a height of 200 feet and more above the surrounding country, sometimes with a slope of 10°, and reaching, with its capping of gravel, the height of 420 feet above the sea-level.

Shooter's Hill appears to have been long famous for its mineral wells, and there is abundance of water still to be found just under its surface, even on the crown of the hill, where a few ponds exist to attest the fact. The position of the mineral spring that bears its name is described by most modern writers as at the top of the hill, but in the earliest notice of it, contained in a hand-bill or broadside, printed and published by W. Godbid in 1673,[1] it is stated to be "at the foot of Shooter's Hill, on the north-west side, near the great road that leads to Graves-

[1] There is a copy in the British Museum.

end." "The situation of the spring, says Godbid, "is pleasant, healthful and commodious, with conveniences of house-room at and near the well, and stable-room for horses." The waters he characterises as "medicinal for internal and external griefs: the scent nitrous and bituminous, the taste brisk and partly bitterish."

It is recorded that John Guy, who in 1675 was tenant of the ground on which the wells were sunk, claimed to have discovered their medicinal qualities, and called them "The Purging Wells." They consisted of three holes; two were steined with brick by Guy at a cost of forty shillings, about four years after their discovery. The water was procured in a very primitive manner, being taken out of one hole by means of a ladder, and by a dish out of another, which was even with the ground. Charles Goodcheape, or Goodcheafe, of Plumstead, Yeoman, the succeeding tenant, erected a small house over one of the wells for greater convenience. The first tenant, Guy, died in 1699. In the August of that year John Evelyn tells us: "I drank the Shooter's Hill waters," and we learn from the London Dispensatory that the mineral well of Shooter's Hill was resorted to for sulphate of magnesia (or Epsom salts) in 1700. Queen Anne is said to have used it.

Hughson, in his "History of London," as recently as 1808, speaks of the spring on the top of Shooter's Hill, which, he says, constantly overflows the well, and is not frozen in the sharpest winters. There is here either a mistake as to the position of the spring, or the reference is to a different one from that described by Godbid. Mr. W. T. Vincent, in

"Records of the Woolwich District" (1888–90), says the mineral well "was and is on the eastern edge of the waste ground behind the Royal Military Academy, and was to be seen until about 1870 under a shed in the garden of a cottage (in rear of the Eagle Tavern) occupied by a Sapper, who had charge of the well on behalf of the Government, and supplied the water to visitors at a small fee. The shed which covered this well seems to connect it with Charles Goodcheape aforesaid, but the shed has now disappeared and the well is seen in the garden under a flat stone." [1]

Walford says, in "Greater London" (1884): "The well is still visited by invalids of the neighbourhood."

A wayside well existed, Mr. Vincent says, in his work already quoted, on the south side of Shooter's Hill Road until recently, but is now filled up and obliterated. It occupied the south-east corner of the Castle [2] approach, and was opposite "The Limes." This was virtually, if not actually, on the top of the hill; but it was not generally regarded as medicinal. It was a dipping well, into which there was a descent of one or two steps. The three wells owned by John Guy, being of similar character, were probably near to each other. An analysis of the water was made

[1] The Ordnance Survey Map (edition 1894–96) marks the position of the well.

[2] Severndroog Castle—erected on Shooter's Hill by Lady James in 1784 to commemorate the taking of a pirate stronghold of that name on the coast of Malabar by Sir William James in 1755. The castle is a triangular brick edifice, with turrets at the angles and containing specimens of native armour, weapons, &c., captured at Severn Droog.

in 1840 by Mr. James Marsh, chemist, Royal Arsenal, who found that a quart of it contained 151 grains of solid ingredients, which comprised about 58 per cent. of sulphate of magnesia, so that taken internally it would act as a mild aperient.

CHAPTER III

OUTLYING SPAS AND WELLS OF SOUTH LONDON

Camberwell—Evelyn's record of a visit—Different theories about the origin of the name—Lysons, Bray, Salmon, and Allport—Well at Dr. Lettsom's Villa at Grove Hill—Milkwell Manor—Effects of an iron spring upon the water in the public baths in the Old Kent Road—Dulwich Wells—Manor of Dulwich presented to the Priory of Bermondsey by Henry I.—Bew's Corner—Grove Tavern—The sinking of a well in the grounds by the proprietor Cox leads to discovery of a purging water—John Martyn experimented on the water, which was supplied to St. Bartholomew's Hospital—Sydenham Wells—Evelyn an early visitor here—Called also Dulwich Wells—John Peter, a physician, writes the first detailed account of Sydenham Wells—Wells Cottage in Wells Road—George III.'s visit to the cottage—Thomas Campbell's house at Sydenham—Beulah Spa—Beauty of its situation—Not known when or how the mineral spring was discovered—Described by Dr. Weatherhead—Analysis of the water by Professor Faraday—Entertainments recorded—Mr. J. Corbet Anderson on the Spa and well open when he wrote—Mineral spring at Biggin Hill—Analysis of the water—Streatham Wells—First account of them by Aubrey—Circumstances of their discovery—Well House, now "The Rookery"—Closing of the old spring and opening of another on Lime Common—Miss Priscilla Wakefield tastes the water—Analysis of the water made by Messrs. Redwood and de Hailes in 1895.

IN Camberwell we again have, as in Islington, a name to which different meanings have been attached. The place is mentioned in the Domesday

Book as a manor of some value, the name being written Ca'brewelle.[1] In subsequent records the letter *b* was exchanged for *m*, and until the sixteenth or seventeenth century the name appeared under the guise of Camwell or of Camerwell. In the seventeenth century, as Blanch informs us in his history of the parish (1875) the *b* found its way back again; but it was not until the middle of the eighteenth century that Camberwell, as it is now written, was officially recognised. Lysons, in his "Environs of London," writes: "I can find nothing satisfactory with respect to its etymology; the termination seems to point to some remarkable spring." Evelyn records, under date of September 1, 1657: "I visited Sir Edmund Bowyer at his melancholie seat at Camerwell." Salmon, the Surrey historian, writing in 1736, says: "It seems to be named from some mineral water which was anciently in it;" and Bray adopts the same idea. But it has also been conjectured by a writer of "A Short Historical and Topographical Account of St. Giles's Church" (1827), the parish church of Camberwell—that as the name of St. Giles conveys an idea of cripples, so, since the prefix *cam*[2] means crooked, the well which gave part of the name to the village might therefore have been famous for some medicinal virtues, occasioning the dedication of the church to this patron saint of

[1] The name in the Conqueror's Survey occurs in this sentence: "Ipse Haimo ten' Ca'brewelle." (Haimo himself holds Cambrewelle.)

[2] To *cam*, in the Manchester dialect, is to cross or contradict a person, or to bend anything awry. ("Words and Places," Isaac Taylor, p. 145.)

cripples and mendicants. Allport,[1] in his account of Camberwell (1841), says that the spring which gave its name to Camberwell rose in the grounds of Dr. Lettsom's Villa at Grove Hill, the lease of which he purchased in 1799. Manning and Bray, in their "History of Surrey" (1804–12), describe the house as standing on a considerable eminence rising gradually for about three-quarters of a mile from the village of Camberwell. Mr. Heckethorn, in dealing with the subject in "London Souvenirs" (1899), points out that the well "appears to have been of some consequence, for in 1782, when the property on which it was sunk changed hands, the owners of the estate reserved to themselves, their heirs and assigns, in common with the tenant, the free use of it." Brayley and Walford, on the other hand, in their "History of Surrey" (1848), treat the statement as merely traditional that the spring or well which gave the name to Camberwell was the same that supplied the reservoir for Dr. Lettsom's fountain.

Within the last century or so, says Walford[2] three ancient wells were discovered in a field in the parish, but they were covered in again by the owner of the land. Among other manors in these parts was one called Milkwell, belonging to the Hospital of St. Thomas, Southwark: there was also a wood called Milkwell Wood in Lambeth, containing 20 acres. These were presumably named from some long-forgotten spring or well.

[1] Douglas Allport, "Collections, illustrative of the History, Antiquities, &c., of Camberwell and Neighbourhood," 1841.

[2] "Old and New London," vol. vi. p. 269.

As a proof of the prevalence of mineral springs in the London area, the recent discovery of one of these within the borough of Camberwell should be mentioned. An account of this quite unexpected "find" was given in the *Daily Telegraph* of June 5, 1906. It appears that the spring in question was tapped by the artesian well which was sunk to a depth of 400 feet to supply the water for the new public baths in the Old Kent Road. "The discovery came about," says the narrator, "in consequence of complaints made by bathers, and others using the baths that the water was dirty. It was a most unfounded charge, as investigation soon proved. The water, it is true, quickly discoloured, and after being warmed or exposed to the air it was found to assume a rusty tinge." The fact was soon established that the water contained not dirt, but iron. "The water," declared Dr. Bousfield, who analysed it "is unusually rich in iron, being comparable in this respect with the Tunbridge Wells water, and it would appear almost as if the (Borough) Council were in the position to set up a spa in the Old Kent Road." A representative of the *Daily Telegraph* was assured by Mr. C. W. Tagg, the town clerk of Camberwell, that several people who were victims of rheumatism and had visited the baths had testified to having experienced undoubted relief after using them, the Mayor of Camberwell himself having found them distinctly efficacious.

Dulwich, says Miss Priscilla Wakefield, in her "Perambulations in London" (1809), "is pleasantly retired, having no high road passing through it";

the nearest, before the nineteenth century, lay two or three miles off, passing through Streatham and Croydon, and the road that traversed Dulwich simply led to the still smaller village of Sydenham.

This comparative seclusion may account for the saying that of all the village entrances in the environs of London, the prettiest is that of Dulwich, and even down to this day it has lost but little of its rural character, not only as regards the village itself, but also beyond it, where one can still saunter through lanes bordered by hedgerows and overhung by branches of oak or elm; and if the nightingale's "long trills and gushing ecstasies of song" are no longer heard, there is yet the cheery voice of the skylark high amongst the morning clouds, and as the evening twilight advances the flute-like notes of the song-thrush.

The ancient form of the name Dulwich appears in many documents as Dilwysshe, which is said to have been derived from De la Wyk or de Dilewisse, the owner of lands in Camberwell in the reign of Henry I. (*circa* 1100). This monarch in 1127 presented the manor with other estates to the Priory of Bermondsey, whose Abbot (the Priory having been raised to the dignity of an Abbey) in 1539 voluntarily surrendered it to the Crown. The purchase of the manor about the year 1606 by Edward Alleyn, founder of the famous "College of God's Gift," is well known.

One of the most interesting spots within the hamlet, at least so far as concerns the subject of these pages, is that formerly known as Bew's Corner, Lordship Lane, on the verge of Dulwich Common,

where now Dulwich Common Lane meets Lordship Lane, and about a mile south-east of Dulwich College. The site was previously occupied by the "Green Man," a tavern of some note in the seventeenth century. Ceasing to be used as an inn, it was renamed "Dulwich Grove," and became the temporary residence of Lord Chancellor Thurlow, while the house at Knight's Hill was being built for him, but which he is said never to have occupied. Subsequently the house, a substantial white stone building of two stories, was opened by Dr. Glennie as a school or academy, at which Lord Byron was a pupil for two years—1799–1801. The house was known to Dr. Webster—an authority on the subject of medicinal waters, and an old resident of the hamlet—in 1815, and about ten years after (1825) when Dr. Glennie had left and the house had been pulled down, he remembered seeing a well within the premises, which had been long disused, but whose waters he tasted and found to be chalybeate. About this time a man named Bew, formerly employed at the college, opened a beer-house here, making use of some of the outbuildings of the once famous school, and converting the grounds into a tea-garden. The Grove Tavern was built on the site of the old school-house, its successor being erected in or about the year 1860, under the name of the Grove Hotel, which it retains. It was in the grounds of the old "Green Man" during the autumn of 1739 that Mr. Francis Cox,[1] the proprietor, having occa-

[1] The family of Cox was long resident in the neighbourhood, as is shown by the Chapel Registers. ("Norwood and Dulwich," Galer, 1890.)

sion to sink a well for the use of his family, dug down about 60 feet, and not finding water filled in the hole. In the succeeding Spring he reopened it in the presence of Mr. John Martyn, F.R.S., a Professor of Botany at Cambridge, who found it to contain about 25 feet of water, and having made a number of experiments, "was satisfied that the new spring was really a purging water . . . being drank fresh in the quantity of five half-pint glasses." It had a sulphurous taste and smell which went off by degrees after the well had been open some days. In a later description of the discovery and of the merits of this spring, published in 1740, Professor Martyn says: "There has not been any medicinal spring observed in Dulwich before." [1]

To such an extent did the Londoners flock to the new spring that within a few years the "Green Man" was superseded by the more appropriate name of "Dulwich Wells." In the years 1748, 1757, and 1762, advertisements appeared announcing: "The purging waters now in their proper season for drinking. The Great Breakfast-Room at the 'Green Man' at Dulwich, opened 16 May, 1748, and continued every Monday during the summer season at one shilling each person." The waters were supplied regularly to St. Bartholomew's Hospital, besides being sold in the streets of London.

After the death of Francis Cox, his son William sold his interest to one James Rowles, a wine merchant in Westminster. This person in 1774 disposed of the house to Charles Maxwell, the

[1] His account of the waters was sent to the Royal Society (Philosophical Trans., xli., 835).

remainder of whose term expired in 1780. His application to the then Master of the College for a new lease led to a lawsuit, owing to the arbitrary terms in which the lease was drawn up. The result was that the College had to pay the costs and give a renewal of the lease to Maxwell. Lord Thurlow heard the suit. Whether this litigation or the falling off of water-drinking in London was the cause, is uncertain, but the Dulwich Wells certainly did decline from this time. At all events they were not in use in 1814, when Bray wrote the third volume of his "History of Surrey."

The name of Cox is kept in remembrance by "Cox's Walk," facing the Grove Hotel—a broad pathway, shaded by an avenue of young trees, and leading by a rather steep ascent to Sydenham Hill.

The local history of Sydenham [1] really commenced with the discovery there of the mineral springs about the beginning of the seventeenth century, when the place consisted of only a few farm-houses and cottages dotted about the common. Previous to 1854, in which year the Crystal Palace was opened, Sydenham was a hamlet and chapelry in the parish of Lewisham. For some reason, probably on account of their nearness to Dulwich, as suggested by Lysons, the *Sydenham Wells* were almost always called Dulwich Wells. Evelyn, who seems to have been

[1] Sydenham appears as Cippenham in ancient documents. Thus in 1332, in the "Annals of Bermondsey Abbey," we learn that "inquiry was made at Cippenham for 60 shillings, due annually to the Church at Bermondsey from the Manor of Cippenham, viz., from the land called Dillehurst." ("Norwood and Dulwich : Past and Present," Allan M. Galer, 1890.)

one of the earliest visitors of note, twice mentions them. Under date September 2, 1675, is an entry in his Diary: "I went to see Dulwich Colledge, being the pious foundation of one Allen, a famous Comedian in King James's time. . . . 'Tis a melancholie part of Camerwell parish. I came back (to Deptford) by certaine medicinal spa waters called Sydnam Wells, in Lewisham parish, much frequented in summer." Two years later, August 5, 1677, this entry occurs: "I went to visit my Lord Brounker, now taking the waters at Dulwich." Seeing that the medicinal spring at Dulwich was not known till 1739, the reference here must be to the Sydenham Wells. A still earlier allusion to them is incidentally made by Culpeper, in his "English Physician," &c.,[1] first published in 1653, in which he says that the juniper bush "grows plentifully hard by the New-found Wells at Dulwich." Lewisham Wells was yet another name applied to the wells at Sydenham, simply because they were in Lewisham parish.

Six years after Evelyn's first visit an interesting and rather amusing tract was written and published in 1680 by John Peter, physician. It is a duodecimo of 88 pages, now very scarce, printed at London "by Thomas James, for Samuel Tidmarsh, at the *King's Head*, in Corn Hill." The style is somewhat pompous and inflated, but his little book is of great interest as being the first detailed account of Sydenham Wells. "It is observable," he writes, "that in that very place where now the Wells are, there used to be only gushings of waters, where multitudes

[1] "The English Physician Enlarged with 369 Medicines made of English Herbs," Nicholas Culpeper, 1653.

of pigeons used to frequent; enough to give intelligence to any observing naturalist that there was something wherewith the water was impregnated that did invite and delight them, some saline aluminous liquor, of which the fowls naturally love to be tippling." Dr. Peter advises that the water should be taken warm, either as a posset drink made in the usual way, or by mixing three pints of the water with a quarter of a pint of boiling milk. He was followed in 1699 by Benjamin Allen, bachelor of medicine, who wrote "The Natural History of the Mineral Waters of Great Britain," an octavo volume which reached a second edition in 1711. In this he describes the "Dulwich Water" as "a water medicated with a salt of the nature of common salt, but with a nitrous quality and a little more marcasitical" (*i.e.*, having the properties of iron pyrites).

"The wells," he goes on to say, "are at the foot of a heavy claiy Hill, about twelve in number, standing together, discovered about 1640. They are about nine feet deep, as I gess'd at view, in which the water stood about half a yard. The Petrif'd Incrusted Stones, when broke, glitter with Ferreous Parts, as Sulphurous marcasites produce; which I proved and found to be only parts of iron. . . . The water taken the same day with Richmond in the quantity of nine ounces and a quarter, was 28 grains heavier than common water and 12 than Richmond. The nature of the salt of this water, which it takes from the peculiarity of the earth which generates it, is that of common salt: in that it turn'd with gall, first yellow and clear, then thick and muddy, white not free of yellowness, in making no alteration in a

solution of sublimat and in making an effervescence with a spirit of niter, but none with spirit of salt."

The first recorded patient who actually experienced the benefit of the Sydenham waters was a poor woman who, in 1640 or 1648—so the story goes—suffering from a terrible disease, was directed by a physician to whom she had applied for advice, to try their effect. This she did, and being soon cured, the springs thus became famous. Besides being partaken of by visitors on the spot, the waters were hawked about the streets of London before 1678, as is proved by a pamphlet of that date preserved in the British Museum, describing how a man who used to cry "Dullidg" water in London killed his own son. The boy had been absent on an errand rather longer than was necessary, for which his father beat him so severely that he died an hour or so afterwards.

"Any fresh and fair spring water here!" was formerly the familiar London cry of those who made it their business to convey it to Town for the convenience of persons who could not fetch it for themselves, nor afford to buy it at the shops where it was on sale.

Till 1802 Sydenham remained a mere sprinkling of houses upon a common, with some old houses on the hill above it—then called Pig Hill. Many of the poorer patients to the wells, it would appear, says Mr. William Young in his "History of Dulwich College" (1889) dwelt on Sydenham Common in huts or structures of a temporary nature.

The story of the little house in the Wells Road, where, in days gone by, the Sydenham waters were

served, is interesting as having been in the occupation of the same family for more than a century and three-quarters. In the early days of George the Second's reign the cottage was purchased by one Alexander Roberts. How long he lived in it is not known, but his daughter (born in 1737) continued to do so after her marriage with John Fairman, who thus became proprietor of the "Green Dragon," the sign adopted for the house. Their daughter Elizabeth married William Evance,[1] whose daughter Mary was the mother of Mr. J. T. Coling, the present owner and occupier of the house which, though slightly modernised, is substantially the same building. The well, which was close to the house on the west side, was filled up by Mr. Coling some fifteen years ago. The second well—there used to be two in the grounds—was covered by the roadway (Wells Road) made about seventy-five years ago.

Dr. Webster, whose name has been mentioned in connection with Dulwich Wells, writes of "the little old cottage where the Sydenham Wells are," and of two elderly women of the name of Evans, who, on his expressing surprise that they had not been bought out for building, replied that they kept possession as the little property would be beneficial to their deceased brother's children. He adds: "It (the well) is not at all resorted to now for medicinal purposes; but the water is strongly saline, similar to that at the quondam 'Beulah Spa,' at Streatham Common, and at Epsom."

Some maintain that the principal spring of the

[1] This seems to be merely a variation of the usual spelling of Evans.

The Dwelling of Alexander Roberts at
SYDENHAM WELLS

From an old print in possession of Mr. J. T. Coling.

WELLS COTTAGE, SYDENHAM.

From a photograph taken in 1903. The well was behind the palings on the left of the picture.

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group on Westwood Common, as it was formerly called, lies under the font in the Church of St. Philip (built 1865–66). Mr. Coling, however, avers that the site of a more important spring is covered by one of a row of small houses facing his own in Wells Road.

A Sydenham Directory for 1859,[1] reprinted from Chambers's *Edinburgh Journal*, contains a description of the spot from the sympathetic pen of a local authoress, in which the dragon is supposed thus to soliloquise: "It was in the year 1760 I received the last touch of the artist and was declared worthy of being exalted to the top of a pole to point out to passers-by the original old well of the Sydenham waters. These had a great reputation—they were a strong tonic—and I have seen them bring back the bloom of youth to many a fading cheek. Many, it is true, came here, who were sick of nothing but an idle life. Age came to drink itself young, dissipation to drown weariness, and imagination to be cured of never-ending diseases; but even these returned refreshed by the early walk, the country breeze, and the matins of the birds." Our dragon then relates how that the Sydenham Wells were on a memorable occasion honoured by the presence of King George III., who spent the greater part of a day in the cottage (then occupied by Mrs. Elizabeth Evance), surrounded by His Majesty's escort of Life Guards), who prevented any curious eyes from looking in. This royal visit was no mere tradition, as some writers would have it, but an undoubted fact. Mr. Coling still possesses the table at which the King

[1] Clark's Sydenham and Forest Hill Directory for 1859.

sat, and down to a recent date the chair he used, but this, having almost perished through age, had to be broken up.

The Wells House continued to attract as a place of quiet entertainment, and was afterwards for some time the headquarters of the St. George's Bowmen, a Society of Archers established in 1789, till the enclosure of the greater part of Sydenham Common, about 1802, put an end to their practice.

One of the few eminent residents in Sydenham was the poet Campbell, who went there in 1804 and remained till 1820. His house is described by Thorne in his "Handbook of the Environs of London" (1876) as on Peak Hill, the third on the right before reaching Sydenham Station of a row of tall red-brick buildings near Peak Hill Road, distinguished from the others by green jalousies at the windows. It was still standing in 1885, numbered 13, Peak Hill Avenue, and unaltered since the poet's occupancy of it, except that the gardens about it had been covered with modern villas and that its rural character had disappeared. The whole of "Gertrude of Wyoming" was written here.[1]

Before concluding this sketch of Sydenham Wells, it may be mentioned that the Directory already quoted contains the name of "Elizabeth Evance, Laundress, of Sydenham Wells, Wells Road," which would seem to imply that they were still open for public use in 1859. The name of this worthy lady is enshrined in some not very poetical verses forming a pendant to an undated view of the grounds and

[1] "Literary Landmarks of London," L. Hutton, 1892.

buildings, but, to judge from the costumes, appearing to be Early Victorian :—

> "And there you will find a wild rural retreat,
> From time immemorial called Sydenham Wells,
> With old Betty Evans, complacent and neat,
> And a Gipsy, if wish'd, who your fortune foretells."

Elizabeth, the daughter of Alexander Roberts and grandmother of "Betty" Evans, was buried at Lewisham June 20, 1791. A note in the register of the parish church shows that she must have been a woman of extraordinary height and size; it states: "She was brought from Sydenham Wells; her coffin was six feet ten inches long, three feet five inches wide, and two feet six inches deep."

Northward of Croydon the hill-forming tendency of the London Clay is shown by the well-marked range of Norwood, Sydenham, and Forest Hills, rising with a long slope from the ground on the east to a height—at Beulah Hill—of about 320 feet above sea-level. From numerous names suggestive of wood or forest in the neighbourhood of Norwood, Dulwich, Sydenham, and Penge, it is evident that in former times a large proportion of the land hereabouts was sylvan. Maps of the middle of the eighteenth century, and later, show considerable areas still uncleared, among them being the great North Wood, lying to the north of the large ecclesiastical town of Croydon.

The mineral spring at Upper Norwood, afterwards known as *Beulah Spa*, we are rather vaguely told, had been "long resorted to by the country folk of the neighbourhood," but it does not appear to be

known when or how it was first discovered. There is also some doubt as to how the name originated. On Rocque's Map of London and its Environs (1746) Bewly Wood and Bewly's Farm are marked, and in a plan of Norwood (1808) Beulah Hill appears as Beaulieu Hill. The Spa probably acquired the name of "Beulah" to express the uncommon beauty and salubrity of the situation—qualities which it certainly possessed in no small degree, so that very little art was needed to convert the place into an ideal garden, with its undulating lawns and sylvan spaces, and a lake in the lower grounds to enhance the effect. A brochure by Dr. George Hume Weatherhead, published in *The Mirror* of April 14, 1832, describes the spot as lying "embosomed in a wood of oaks, open to the south-west, whose dense foliage shelters and protects it, and is now the sole vestige of the former haunts of the gypsies."

It was Mr. John Davidson Smith who first conceived the idea of laying out this portion of his manor of Whitehorse for the purpose of rendering available the medicinal properties of the spring, which, like Dulwich, Sydenham, and Streatham, was strongly impregnated with sulphate of magnesia. The conversion of the ground—some 25 to 30 acres in extent—into a place of recreation was begun about the year 1828. Its position was between Leather Bottle Lane (now Spa Hill) and Grange Wood. Through this estate carriage-drives and winding footpaths were cut; and from thence extensive views were obtained. The buildings in connection with the Spa included a very ornate lodge at the entrance to the grounds, an orchestra, an octagon-

A. S. Foord fecit.

BEULAH SPA IN 1851.

From the *Illustrated London News ;* by permission of the editor.

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shaped reading-room, with arcades on either side in which refreshments were served, and the Spa Well under "a thatched hut built in the form of an Indian Wigwam"; the whole being carried out from the designs of Mr. Decimus Burton, the architect. One of the seats in the gardens was the favourite resting-place of the late (1834) Countess of Essex, and from her afterwards called Lady Essex's seat.

Referring to the spring itself, Dr. Weatherhead writes: "It rises about fourteen feet within a circular rock-work enclosure; the water is drawn by a contrivance at once ingenious and novel; an urn-shaped vessel of glass, terminating with a cock of the same material, and having a stout rim and cross handle of silver, is attached to a thick worsted rope and let down into the spring by a pulley, when the vessel being taken up full, the water is drawn off by the cock." An analysis was made by Professor Michael Faraday, who pronounced it to be principally distinguished for the quantity of magnesia contained in it, resembling, but far surpassing, in this respect, the Cheltenham waters.

A pint of the water yielded solid ingredients in the following proportions:—

	Grains.
Sulphate of Magnesia	61·35
Chloride of Sodium	17·74
Muriate of Magnesia	9·28
Carbonate of Lime...	7·80
„ of Soda...	1·90
	98·07

It was, in fact, one of the purest and strongest of the saline spas in the country.

From guide-books to the Spa, of which three are preserved in the British Museum, namely, for the years 1832, 1834, and 1838, we learn that the price of admission was on ordinary days 1s. and on *fête* days 2s. 6d.; the yearly subscription for a family was three guineas, and for one person a guinea and a half. Visitors could either drink the water on the premises or have it brought to their lodgings; the water was also delivered in London at two shillings per gallon.

Conveyance from and to Town was effected by a service of stage-coaches starting from the "Silver Cross" at Charing Cross, and running several times a day between that and the Spa. Fares: outside, 1s. 3d.; inside, 2s. 6d.

For the entertainment of the visitors during the season, a military band played every day from eleven till dusk, while for those who had a fancy to trip it on the light fantastic toe, there were lawns laid out for the purpose. There were also a camera obscura, a rosary, an archery ground, and for the more æsthetically inclined there was always the view from the upper terrace of the beautiful range of the Surrey hills lying on the horizon. On festive occasions, such as *fête* days, special amusements were provided of a kind to suit the tastes of the company expected. The various charitable institutions were also invited by the proprietors to hold their *fêtes* here in aid of their funds. Some of these were evidently highly successful, for on the occasion of a *fête champêtre* held at the Spa in the month of July, 1834, about 3,000 persons were present. But, after all, these open-air functions were very dependent for their success upon

the state of the weather, for we read that when, in July, 1838, a *fête* was organised for the benefit of the Polish refugees, it was so impropitious that the Committee who guaranteed it lost upwards of £300, the attendance falling woefully short of expectations; the poor Poles suffering accordingly.

A Mr. James Fielding appears to have been the first manager or lessee when, in August, 1831, Beulah Spa was first opened to the public. Newspapers of the day mention how rapidly it grew in popularity, and became a fashionable rendezvous with the *beau monde*, many personages of rank and distinction visiting it. In the season of 1833 Mrs. Fitzherbert and the Earl and Countess of Munster were among the visitors. The following year the Duke of Gloucester visited the Spa to drink the waters.

The season of 1835 commenced under the auspices of a new proprietor. A Mr. Newman had, it appears, already made many improvements, and had more in preparation on an extended basis. Great attention was paid to the flower-beds, and an immense tent was erected for the accommodation of the band. The price of admission was, at this time, lowered to 1s. On June 5th of this year (1835) the Whitehorse Estate, including the Spa and other properties, were put up to auction. The particulars of sale comprise the "Ornamental Grounds, Pump Room, Music Room, Gothic and other buildings attached to the Spa." The purchaser—Mr. Atkinson—was a man of property under whose tasteful direction the grounds were thoroughly renovated, the Spa being conducted upon the principle of a subscription, which seems to have been freely taken up by the

neighbouring gentry, as well as by members of the upper classes in London. Vocal and instrumental concerts were a prominent feature of the entertainments. In 1839 a *fête* for the Freemasons' Girls' School was given here, under the special patronage of the Queen Dowager. The concert provided for the occasion was of a first-rate order; Grisi, Persiani, Rubini, Ivanhoff, and other operatic celebrities lending their assistance.

The attractions of the Spa were kept constantly before the public, through the newspapers, and for some few years—for its career was comparatively short—all went well. In 1844 the death took place of Mr. J. D. Smith, the original proprietor, and whether this occurrence reacted upon the place detrimentally, or not, the place is described in the *Times* of June 4, 1851, as having "of late years fallen into a languid and deserted condition." About this time the widow of the original proprietor recovered possession of the grounds and contrived by spirited management to revive some of the "ancient glories" of the place. The gardens were again thrown open for the season and on August 31, 1852,[1] a *Fête Villageoise* was held, showing them to be once more in full operation. They were still open in 1854, but in the "Pictorial Handbook of London" for that year the buildings around the lawn are described as being "all now more or less decayed and neglected." Wroth ("Cremorne and the later London Gardens," 1907), places their close in about the same year.

[1] An admission ticket for the season 1852, signed "T. H. Evans, Director of the *Fêtes*," is preserved in the Rendle "London Wells" Collection at the Guildhall Library.

BEULAH SPA.

From a photograph taken in 1903. The well, boarded over, is seen in the foreground.

STREATHAM (NEW) WELLS HOUSE (ABOUT 1902).

Now used as a dairy farm. (See page 237.)

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The late Mr. C. H. Spurgeon's residence, "Westwood," Beulah Hill, occupied part of the property.

More recently the Beulah Spa is noticed in a book by Mr. J. Corbet Anderson, entitled "The Great North Wood." Writing in 1898 he says: "The charming grounds of Beulah Spa remain comparatively intact. The old paths still wind through the shrubberies and woods; the octagonal-shaped rustic orchestra, overgrown with ivy, still stands not far from the once famous well. The well itself, as yet uninjured, is about 12 feet deep, and full of water." The writer of the present article visited the place in the summer of 1903, and found it in much the same state as described by Mr. Anderson. The house and grounds, reduced to about 6½ acres, and called "The Lawns," were put up for sale on July 30, 1903, by order of trustees, but the hammer fell to a bid from the auctioneer of £7,000, and the property was withdrawn.[1]

There was an advertisement in the *Athenæum* of December 13, 1862, of a hydropathic establishment near by. This was succeeded by the Beulah Spa Hydro' and Hotel, the proprietor of which, Mr. Cephas Barker, recently informed the writer that there were several disused springs in their garden and one in that of the next house, at that time (1903) occupied by Mrs. Spurgeon.

Several views of Beulah Spa were published in the newspapers and periodicals of fifty or sixty years ago, and it was the subject of a song, of the sentimental

[1] In July, 1904, the house, with its 20 acres of grounds, &c., was again offered for sale, but the investment was withdrawn at £13,200. (*Daily Telegraph*, July 4, 1904.)

kind then in vogue, entitled "I met her at the Beulah Spa," the cover of which gives a picture of the grounds and buildings.

There used to be another mineral well about half a mile to the north-west of Beulah Spa, at Biggin Hill, the water from which gushed up at the rate of seven gallons a minute. In 1898 it was closed. The subjoined analysis of water from a well, which is at White Lodge, Biggin Hill, formerly the residence of Mr. H. Wilson Holman, was kindly supplied by him to the writer in 1907. This well, he says, "undoubtedly taps the same spring that used to come out at the bottom of Biggin Hill, and which was blocked by the sanitary authorities in 1898. The site of the spring was beyond the small tenement houses at the bottom of the hill, and there is still some masonry in existence—the end of the culvert where the water used to run out into a pond. The reason of its being blocked was that it is alleged to have poisoned some domestic animal."

REPORT ON SAMPLE OF WELL WATER TAKEN FROM PUMP IN BACK COURT-YARD AT WHITE LODGE, BIGGIN HILL, BEULAH HILL, S.E.

Ammonia Free ...	·033	Parts per 100,000.	Traces
Albuminoid ...	·025	of animal matter.	
Dissolved Solids, Inorganic ...		321·48	Grains per gallon.
" " Organic, &c....		19·94	" " "
		341·42	
Chlorine		23·10	" " "
Nitric Acid (NO_3)		0·20	" " "
Sulphuric Acid (SO_3)		140·25	" " "
Alkalies (Sodium and trace potassium)		50·12	" " "

Magnesia (MgO)	9·59	Grains	per	gallon.
Lime (CaO)	97·40	„	„	„
Sodium Chloride	38·11	„	„	„
„ Nitrate	0·30	„	„	„
„ Sulphate	14·33	„	„	„
Magnesium Sulphate	28·77	„	„	„
Calcium „	192·10	„	„	„
„ Carbonate	32·57	„	„	„

Remarks.

Faintly yellow and turbid ; containing a trace of iron, but no poisonous metals ; the microscopical residue consists of vegetable debris. The character of this water is rather remarkable, containing a larger quantity of mineral matter than is often found in mineral springs. The mineral matter would make it a permanent hard water, only a little being destroyed by boiling.

Organically this water is very impure, and this, in conjunction with the large amount of mineral matter it contains, renders it absolutely unfit for domestic purposes.

(*Signed*) F. B. Burls, A.I.C.

July 7, 1894.

It is a somewhat remarkable fact that the mineral springs in Streatham have continued to supply their waters uninterruptedly for nearly two and a half centuries, while most others in and near London have either been drained away into the sewers or the wells formed from them filled up. The first account of the *Streatham Wells* is given by Aubrey, the well-known topographer and antiquary, in his "Natural History and Antiquities of Surrey," begun in the year 1673. About fourteen years before he wrote—namely, in 1659—there was a field under cultivation on the south side of the top of Streatham Common, belonging to the Vauxhall Manor, in the grounds just below Wellfield House. Referring to the soil, Aubrey says: "It is a cold, weeping, and rushy clay ground; in hot weather shoots a kind of salt or allum on the clay, as in the

lower grounds in North Wilts; turns milk for a posset; five or six cups is the most they drink, but the common dose is but three, which are held equivalent to nine at Epsom." Dr. Monro prescribes three pints or more for the dose ("Mineral Waters," 1770, vol. i. p. 135). The circumstances of the discovery were these :—

In the early Spring of 1660[1] the land was being ploughed, and the horses, floundering in a quagmire, suggested the existence of an underground spring. "Afterwards at weeding time," to use Aubrey's words, "the weeders being very dry, drinking of it, it purged them; by which accident its medicinal virtue was first discovered." The owner of the ground at first restricted the use of these waters, but before the end of Charles II.'s reign they had come to be generally used. Three wells were formed and they possessed contrary properties: one acted as an emetic, and another was valued as a specific in the removal of intestinal worms.

Among the physicians of the eighteenth century who describe Streatham waters is Dr. John Rutty, in his elaborate "Treatise on the Medicinal Waters of Great Britain and Ireland" (1757), in which he describes them as "a weak solution of a salt, partly like sea-salt and partly nitrous, with a little sulphur, and a greater proportion of absorbent earth than Acton water and some others." According to this writer the Streatham waters yielded 200 grains of mineral

[1] 1659 being the year of discovery, there is here an apparent discrepancy; it may be explained by reminding the reader that previous to 1752 the year was held to begin on the 25th of March.

matter per gallon. He then proceeds to say: "Having occasion to go to the wells a twelvemonth ago, I found them situated on the declivity of a pleasant hill, about one hundred yards from the house on Streatham Green (*i.e.*, Streatham Common); I saw but two, the third had been filled up some time. The wells were distant from each other about fifteen yards, both are arched, secure from rains." A pump was also fixed over the wells to prevent the decomposition of the water.

Mr. Frederick Arnold, in his "History of Streatham" (1886), devotes a chapter to the subject of these springs, which contains probably all the information now procurable regarding them. Towards the end of the seventeenth century they had attained some renown. A house was enlarged or rebuilt for the accommodation of the numerous visitors, identical with the one now called "The Rookery," which is the last house at the top of the Common, but which at that time was called "Well House." The early years of the wells seem to have been somewhat chequered by their changing hands rather frequently, and the characters of their owners being alternately pushing and apathetic. By the commencement of the eighteenth century the reputation of Streatham Spa, under the régime of an energetic proprietor, may be said to have stood at its highest. The Common, with its broad lawn of smooth, bright turf sloping upwards, was then a fashionable promenade. Every Monday and Thursday during the summer of 1701, there was a concert at the wells, and Streatham was then the scene of much gaiety. No doubt some persons of note in those days

visited the wells, though their names may be unrecorded.

In 1717 it appears from an advertisement in the *Post Boy* that the water was on sale at several London coffee-houses, namely, at Nando's Coffee House, near Temple Bar, Child's Coffee House in St. Paul's Churchyard, the Garter Coffee House behind the Royal Exchange, and at the "Two Post Boys" in Stocks Market. In the year just mentioned one Thomas Lambert was proprietor. About fifteen years after this an announcement appeared in the *Daily Journal* (June 13, 1732), that Streatham Wells House was to be let. It is described therein as being "a good brick house, with large stabling, famous for excellent waters, and is much frequented. Situate on Streatham Common, about six miles from London in the road to Croydon. The house being kept open by the desire of several gentlemen; there is good accommodation and an ordinary every Sunday.—Inquire of Mr. Charles Shuckburgh, Grocer at the White Hart in Blowbladder Street,[1] the upper end of Cheapside."

Dr. Rutty states that in 1744 Streatham waters, with those of Acton and Dulwich, were most in vogue. Assemblies are mentioned as being held in connection with Streatham Wells so late as 1755, but from that date till the time when Lysons was writing his "Environs of London" (1792) nothing of special interest is to be found concerning them, except for the visits of Dr. Johnson, who from about 1766 down to almost the last twenty years of his life, was a constant visitor at Thrale Place, whence a pleasant

[1] Now Newgate Street.

walk over the Common, which then extended on the west side of the high road, brought him to the wells.

A few years later, that is after about 1792, Mr. Arnold says, but without giving his authority, the spring was closed. A little building encloses the pump over the well, which attains the depth of 35 feet, the raising apparatus having gone to decay.[1] This little erection is in the kitchen garden of "The Rookery," which is surrounded by high walls, and in that way the old spring, of which John Aubrey wrote, is enshrined.

The final closing of the old spring caused people to turn their attention to another spring of a similar kind, which had been discovered at the end of the eighteenth century, about half a mile distant on the east side of the village of Streatham, at the bottom of Wells Lane, on a part of the Common of the Manor of Leigham called Lime Common.

And here it may be noted that most writers, from Lysons onwards, fail to make it sufficiently clear that the medicinal well in the Valley Road, the only one now open, is quite distinct from, and was in fact

[1] The present condition of the old well is thus described by Mr. H. Wilson Holman in a letter to the writer: "The old Streatham Spa House, at present occupied by Mr. Ernest S. Holman, is the freehold property of the trustees of the Coster Estate. The well in the kitchen garden is still (1907) in existence, with an old lead pump attached. During the tenancy of the former owner this water appears to have been used for bathing purposes, as there is a circular house over the well and pump and a big lead bath. I have not an analysis of this water, but believe it is aperient in its action, there being traces of Epsom salts and iron. It is reported to be now unfit for drinking purposes."

discovered more than a century and a half after, the original springs on the Common. Lysons, in the second edition of his "Environs of London" (1811), speaks of Streatham water as being "still held in considerable esteem," but that "there are no accommodations for persons who come to drink it on the spot, yet the well is much resorted to by those who cannot afford a more expensive journey." These remarks convey the impression that he is referring to the old wells, were it not for the reference to the want of "accommodations," which we know the new wells were unable to provide.

Some time before 1809 the wells were visited by Miss Priscilla Wakefield, authoress of "Perambulations in London," published in that year, in which she writes: "We stopped at Streatham, where we tasted of a mineral spring which would probably be more highly esteemed for its medicinal qualities by the Londoners, if it was not so near home, as the water is sent in considerable quantities to the hospitals." Here again, relying upon Mr. Arnold's information as to the closing of the old wells, it was the new spring on Lime Common that Miss Wakefield visited. It was not until Walford undertook the revision of Brayley's "History of Surrey" (published by Virtue and Co. in 1848) that a proper distinction was made between the original well on Streatham Common and its successor on Lime Common, the former being described as belonging to the Vauxhall Manor in Lower Streatham, and the latter to the Manor of Leigham.

Later on in the nineteenth century, when tea-gardens were still resorted to by Londoners, the one

A. S. Foord fecit.

STREATHAM (NEW) WELLS HOUSE (1831).

Guildhall Library.

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attached to Streatham (new) Wells House was used down to the eighteen-sixties. The house itself is a plain but substantial building of brick, faced with stucco, and having a bust of Æsculapius over the doorway. On the north side of the house, and forming a sort of annexe to it, is a room which contains the pump over the well, where the water can be drunk on the premises. It is sold in bottles, at sixpence per gallon; in glasses at one penny each; and is delivered to all parts of London at one shilling per gallon. From inquiries made, it appears that the water is not advertised in the local newspapers, though casual notices have been published from time to time in some of the London papers, *e.g.*, the *Westminster Gazette*, *Pall Mall Gazette*, *Daily Mail*, and *Morning Post*. However, according to a pamphlet procurable at the wells, the water is "delivered to all parts of London daily," and "sent to all parts of the United Kingdom"; also exported to Delagoa Bay and Buenos Ayres; so that a trade is still done in it. The following particulars are quoted from the pamphlet: "The water rises at a temperature of 52° Fahrenheit. When recently pumped up it has a slight odour of sulphur, is sparkling and bright, and although it contains much sulphate of magnesia, it is not unpleasant to the taste; on the contrary, it leaves behind it a freshness which is grateful to the palate. Although it contains quite an appreciable amount of iron, causing an ochreous deposit to form upon the pumping apparatus, it cannot properly be classed as a chalybeate, like Hampstead Wells, for example.

An analysis of the water was made in April, 1895,

by Messrs. Redwood and de Hailes, analytical chemists, of Red Lion Square, Holborn, with the following result:—

Sample of Mineral Water from the Well at Streatham, in the possession of Messrs. Curtis Brothers, Valley Road.

Magnesium Sulphate	...	415·10	grains	per	gallon.
Sodium Chloride	...	19·65	„	„	„
Ferrous Carbonate	...	3·04	„	„	„
Potassium Chloride	...	Traces		„	„
Calcium Carbonate	...	76·67	„	„	„
Sodium Carbonate	...	18·00	„	„	„

The water is naturally charged with Carbonic Acid. Taken internally, it would act as a mild aperient.

REDWOOD & DE HAILES.

The pamphlet goes on to describe the effect this water has upon the system: "The late Dr. Baillie found it a most valuable remedy in liver complaints and indigestion, especially in jaundice and bilious attacks. Its action as a tonic is not mechanical; it restores strength and vigour to the weakened frame by a direct operation on the system in general, and by improving the quality of the blood." Without attributing to the Streatham waters any marvellous cures, they may still be credited with the power of restoring an impaired state of the digestive organs, which, considering the importance of their function, is no slight merit.

The continued pureness and immunity from contamination of the well is doubtless due to its isolated position, the premises standing in their own grounds, apart from the nearest buildings in the Valley Road.

Locally there seems to be only a very slight demand for the water; a few regular customers there

"THE ROOKERY," STREATHAM COMMON.

In the back garden is the medicinal well. From a photograph taken about 1990.

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may be, and occasionally a chance caller will drop in to taste the water, perhaps more through curiosity than from any intention of becoming a regular drinker. There would therefore appear to be little inducement to the proprietors to make any special efforts to attract customers. Such being the condition of affairs, there is small hope of any material increase in the local demand for these waters.

With the object of ascertaining the earliest mention of these later wells, an exhaustive search was made by the writer some four years ago in the Streatham parish rate-books, back to the year 1780, covering a period of nearly 125 years, and though there was no great difficulty in identifying the house, yet in none of the books is any mention made of the mineral well, for, besides the house itself, only offices, outhouses, sheds, and meadow-land are particularised.

The Curtis family have, according to the rate-books, occupied these premises since about the year 1875, when Thomas Curtis took them over from one Nathaniel Hibbart, James Coster's executors being the owners. Thomas was succeeded by Mrs. Curtis (presumably his widow), after whom the brothers Curtis had possession, which they still retain.

One of the earliest, if not quite the earliest, map on which the existing spring is marked, is by W. Faden, 1810: the words "Streatham Wells" are inserted in it just against the hill of Lime Common.

There is in the Guildhall Library an Indian-ink drawing of the house, dated 1831, and on the walls of the Pump Room hang two or three water-colour sketches of the house.

CHAPTER IV

WELLS AT RICHMOND AND EAST SHEEN

Richmond Wells—Saline spring—Noticed by Dr. Benjamin Allen in 1699—House of entertainment—Balls and concerts advertised—Dissipated company at the wells—Raffling and card-playing—The place eventually purchased by the Misses Houblon—Well at East Sheen, adjoining Palewell Park.

ABOUT the year 1689, or, according to some writers, two or three years earlier, a saline spring was discovered at Richmond in grounds subsequently occupied by Cardigan House,[1] which stands on the slope of the hill going towards the town.

Dr. Benjamin Allen, in his "Natural History of the Chalybeate Waters of England" (1699), mentions, among other purging or aperient waters, this one at Richmond, but without giving any particular account of it, merely saying: "This water is a level spring; the wells are on the side of the

[1] Cardigan House was once the residence of the Earl of Cardigan, and afterwards of Miss Roberts, who was occupying it in 1842, and who left it to her relative, Mr. James Campbell, from whom it was purchased by Captain Willis, one of the Conservators of the River Thames. (Chancellor's "History and Antiquities of Richmond," 1894.)

hill a few rods from the River Thames, in a brown loamy clay, and are about nine feet to the bottom of the water. . . . This water purgeth well, but I think scarce so much as Epsom and Acton, but more smoothly."

It was not until about six or seven years after the discovery of the spring that a house of entertainment was built in conjunction with it. This was in 1695–96: Assembly, Card, and Raffling Rooms were added, and the place received a considerable amount of public patronage. An advertisement in the *London Gazette* for April 20–23, 1696, affords some notion of the appearance of the place just before its opening. It runs thus: "The New Wells on Richmond Hill will be compleated for the reception of Company this following May. There is a large and lofty Dining Room, broad walks, open and shady, near 300 feet long, cut out of the descent of the Hill, with a prospect of all the country about." There were two entrances, one in the lower road leading to Petersham, the other about where the lodge and entrance-gates to Cardigan House now are.

The management lost no time in providing amusement for their patrons. An advertisement which appeared in the *Post Boy* for June 11, 1696, was as follows: "At Richmond New Wells a Consort of Musick, both Vocal and Instrumental, will be performed on Monday next (13th) at Noon, by principal Hands and the best Voices, composed new for the day by Mr. Frank; the songs will be printed and sold there." Although not expressly stated, this was probably the occasion of the inauguration of the wells, for no advertisement prior to this date

appears in any newspaper of that day; that of the previous April merely set forth the attractions of the spot.

The success of the new speculation would appear to have far exceeded the expectations of the proprietor, for soon afterwards such a concourse of persons of quality attended that the price of admission was requested to be doubled, to keep the company select: this increase, however, made it only sixpence each person; but probably this sum did not include any of the entertainments, the charge for concert tickets being, we are told, five shillings each. In the *London Gazette* for April 5–8, 1697, the wells were for some unexplained reason, advertised for disposal by purchase or lease.

From the early years of the eighteenth century advertisements appeared in the public press at pretty frequent intervals: in these the principal attractions held out during the first five-and-twenty years or so were musical entertainments and dancing. Games of chance, as was customary at these resorts, were freely indulged in by those who had either passed the age for active amusements or lacked the taste for them.

Referring to the *Postman* of August 9, 1701, we read that a concert was to be held in the Great Room "to hear a Mr. Abel sing alone to the harpsichord." Later in the evening there was to be dancing. In the same paper for August 10, 1703, is advertised a "Great Consort of Music, beginning at 5 and ending at 7, because of the dancing after." Tickets at five shillings each were to be had at White's Chocolate House and Garraway's Coffee House.

Some of these advertisements have a postscript to

them containing hints about the tides upon the river, such as that "the Tyde of Flood begins at 1 o'clock in the afternoon and flows till 5, ebbs till 12 for the conveniency of returning." This reads rather oddly when one thinks of the Thames of to-day, which, except in the summer months, is comparatively deserted, save for a few barges and steam-tugs; certainly no one thinks of using it at night. The waterway was chosen in those days because it offered a far easier, quicker, and even safer way, than the roads, which shortly after the Hanoverian accession must have been truly abominable, to say nothing of the risk of encountering footpads. In a work called "A Journey through England in 1724," Richmond Wells is mentioned thus: The author, one Mackay, says, "There are balls at Richmond Wells every Monday and Thursday evening during the summer season." The *Craftsman* of June 11, 1730, contains a notification "to all gentlemen and ladies that have a mind either to raffle for gold chains, equipages, or any other curious toys, and fine old china; and likewise play at quadrille, ombre, whist, &c., and on Saturdays and Mondays during the summer season there will be dancing as usual." The dissipation here indicated went gaily on, and dating from its commencement in 1696, the wells enjoyed a career of success and popularity for above half a century. Like Ranelagh and Bagnigge Wells, and indeed most of the pleasure gardens, breakfasts, as well as dinners and teas, were supplied at the Richmond Wells. The fashion of the public breakfast, now so entirely forgotten, was brought to London from Bath, Tunbridge Wells, and Epsom. Tea and coffee were served at

this meal, which is specially mentioned in advertisements issued in May and June, 1748, when a Mr. W. Knight was proprietor of the wells. In 1750 they appear to have reached the summit of their prosperity, and from about this period their rather rapid decline may be dated. Assemblies were still made known in 1755, and also in 1756, at which time a Mr. Williams was proprietor. A change for the worse seems now to have stolen over the tastes and pursuits of the visitors. There was much card-playing but little water-drinking! The wealthier visitors soon began to withdraw their support; the prices of admission were lowered in order to attract a lower class of customers, and these soon obtained for the place an unenviable notoriety. The noise and tumult prevailing each night became a nuisance to the neighbourhood. The place was eventually (in 1775) purchased by two maiden ladies—the Misses Houblon—founders of the charity known as the Houblon Almshouses in the Marsh Gate Road, Richmond.

Dr. John Evans, writing about Richmond in 1825, says: "Some of the oldest inhabitants of Richmond recollect there being a house and assembly room adjoining the medicinal well." A large antiquated building in the Lower Road was pulled down a few years before 1866, which was said by an old inhabitant to have originally formed a portion of the wells establishment. The rooms of this building, from their peculiar construction and style, had evidently been originally intended for a house of public entertainment. They bore traces of a structure of a superior character, being well finished

and ornamented with heavy cornices. An old pile, consisting of stabling and coach-houses, &c., cleared away about 1861–62 for the purpose of building the row of small houses known as River Dale Terrace, doubtless formed a small remaining portion of a much larger erection for putting up the horses and vehicles of the nobility and others who came to the wells at one time in great numbers, especially on gala nights. With the exception of these buildings, all the others were demolished, and according to Mr. Richard Crisp,[1] about the year 1780 Richmond Wells as a place of entertainment had ceased to exist.

Dr. Evans,[2] who has been already mentioned, says: "There is no chalybeate spring now at Richmond, properly speaking; but there is in the New Park,[3] at the top of the hill, a bubbling up of water, which running down into the adjacent vale, exhibits indications of an ochreous description, which," he naïvely adds, "might be gathered into a basin, and become subservient to the health of visitants."

In reply to an inquiry made by the writer about three years ago as to the existence of the well in the grounds of Cardigan House, the information given by Miss Willis, who resides there, was that frequent search had been made for it during the last thirty years, but without a successful result.

A search through the collections of local literature

[1] "Richmond and its Inhabitants from the Olden Time," Richard Crisp, 1866.

[2] "Richmond and its Vicinity," by John Evans, LL.D., second edition, 1825.

[3] This answers to Richmond Park, as now known. The Old Deer Park adjoins Kew Gardens.

and prints at the Richmond Public Library, kindly made for the writer by the Librarian—Mr. Albert A. Barkas—failed to discover any picture of the Richmond Wells Buildings; but it is of course possible that some representation of them may exist in private hands.

At East Sheen, in the north-west corner of Palewell Common (known locally as the "Donkey Common"), adjoining Palewell Park, is a well, the water of which, some forty years ago, was, in the recollection of an old inhabitant, much used by people of the neighbourhood for bathing the eyes; and for the legs, especially of children, probably those having skin complaints. The spring, which was reputed to contain some mineral constituents (among them probably a little iron) helps to feed a pond close by. There is now (1908) no apparatus for drawing the water, which, when in an undisturbed state, is clear and pure.

Many of the eighteenth-century spas and tea-gardens lasted almost to our own time—at least those of us who are beyond middle age—but the original character of such places as Bagnigge Wells (closed 1841), White Conduit House (closed 1849), and Highbury Barn (closed 1871) became greatly altered. Beulah Spa, the last of the London "Spas" (*circa* 1831–54), had a shorter life than either of the places just named. Its amusements were in every way characteristic of a later period; the changes in the manners and morals of the age since the reigns of Anne and the Georges being doubtless accountable for this.

PART III

CONDUIT SYSTEM OF WATER-SUPPLY

CHAPTER I

THE LONDON BASIN, SHALLOW WELLS, CITY CONDUITS

Geology of the London Basin—Tyburn Conduit—Population of London—Great Conduit in Chepe—Pay of workmen—Little Conduit—Conduit at Stocks Market—The Standard opposite the end of Honey Lane—John Lydgate—Pageants—Catherine of Aragon's State entry into London—The Tonne, or Tun, upon Cornhill—Stow's explanation of the name—Charterhouse, provided its own water-supply—Conduits at London Wall, Coleman Street, Bishopsgate.

THE opening chapter of "Early London," the latest volume of Sir Walter Besant's "Survey of London," written by Professor Bonney, invites the reader to picture the valley of the Thames "as it was more than two thousand years ago, when the uplands north of the river were covered by a dense forest, and the 'Andreds Wald' (as it was afterwards named)—a vast sheet of scrub, woodland, and waste stretching from the Sussex Coast to the slopes of the Kentish Downs." Through the valley the Thames must have flowed "in a channel broader but straighter than its present one, a channel which is now indicated by a tract of alluvial land a few feet below the level of the valley, and but little above high-water mark. . . . The most marked indication of

this alluvial plain begins about a mile below London Bridge. Here the left bank of the river is formed, as it has been from the bend at Hungerford Bridge, by a terrace ranging at first from about 25 to 40 feet above mean tide level, a most important physical feature, for it determined the site of London."[1] But the choice of the site was made primarily because of the river, for without the Thames there would have been no city; the silent highway of its broad waters bears the commerce which sustains the city, and has enabled it to develop into the market-place of the world.

The greater part of old London and the many villages[2] now incorporated in modern London were built on the valley gravel and loam (brick-earth); ancient alluvial deposits of the Thames and its tributaries, occupying tracts above the level of the marshland. The residential sites were naturally chosen where a supply of drinking-water could readily be obtained from springs and brooks or by means

[1] The height of the ground on the Middlesex side is not inconsiderable, though it is difficult to realise, as the physical features are so much masked by buildings. Following a line from east to west along the top of what was once a low cliff overhanging the river, the highest points marked on the Ordnance Survey Map of London (ed. 1894–96) are these: On Tower Hill 42·3 feet above the mean level of the sea; Gracechurch Street 56·8 feet; Royal Exchange (south side) 50·7 feet; St. Paul's Churchyard (north-east angle of Cathedral) 57·9 feet; Newgate Street (corner of St. Martin's-le-Grande) 59·8 feet; Fleet Street (at Fetter Lane) 50·8 feet, &c. (*Edinburgh Review*, October, 1908).

[2] Entick ("History and Survey of London," 1766) puts these at 49, together with one city (Westminster) and one borough (Southwark).

of wells. Obtaining supplies from the latter by the bucket and windlass was, however, often attended with considerable difficulty on account of the great depth to the source of the water, except in the case of shallow wells,[1] long used for collecting moderate supplies of water, where a permeable stratum, such as the gravel, overlies an impermeable stratum, such as the London Clay.

A few remarks on the geological structure of the London area may serve to render the subject more intelligible. London is situated on what is termed in geological language a "basin"—the "London Basin." The solid foundation, at some depth underground (150 to 300 feet, and less in places) is composed of the chalk, a formation here about 650 feet in thickness. This it is which constitutes the so-called basin, whose broad rim comes to the surface in the Chiltern Hills on the north and north-west, and in the North Downs on the south. The hollow of the London Basin is filled by a series of sedimentary formations which belongs to the period called Eocene and is classed as Tertiary. Conforming generally to the gentle fold into which the chalk has been bent, they consist of a lowermost group of sands, pebble-beds, and clays, known as the Lower London Tertiaries, overlain by a great mass of clay, termed the London Clay, and followed by a group of sands with thin

[1] Shallow wells catch the ground and subsoil water; they are generally under 50 feet deep, the water is hard, nearly always impure, and often foul from sewage. They rarely supply enough water for more than a few houses, and the cost of pumping being generally prohibitive the water has to be carried by hand.

clayey bands known as the Bagshot Sand, which in London itself caps the higher grounds of Hampstead and Highgate. Of these strata the London Clay occupies the most extensive area, the thinner group below (Lower London Tertiaries) appearing at the surface over a comparatively narrow belt.[1] North of the Thames the London Clay, overlain by gravel, is arranged in two well-marked terraces, each with a pronounced declivity bounding it on the south, while northwards it dies off imperceptibly as the clay rises to the surface. The lower terrace is bounded by the steep fall from the Strand to the Thames, and here the spring at the old Roman Bath still exists to mark the junction of gravel and clay. These terraced gravels were, in fact, the great water-bearing strata of London.[2]

Most villages, like those of old in the London area, have been built on porous subsoils from which the water-supply was readily obtained, and in most cases such shallow sources became exposed to the worst forms of contamination. The soakage from stables, from cess-pits, and in some instances the infiltration of the decaying matter from burial-grounds, had rendered many of the shallow wells actually poisonous; clear, sparkling, even palatable, though the water might be, there was often "death in the cup." A pump, the water of which was much esteemed, stood by the wall of the churchyard of

[1] For the above information the writer is indebted to "Soils and Subsoils of London and its Neighbourhood," by Horace B. Woodward, 2nd ed., 1906.

[2] A. Morley Davies, "London's First Conduit System," London and Middlesex Archæological Society Transactions, 1907.

St. Giles-in-the-Fields in High Street (south of New Oxford Street). The water became infected, and the cholera ravaged the immediate neighbourhood.

Outside the City limits the growth of London was, as pointed out by Sir Joseph Prestwich,[1] restricted, till the regular establishment of waterworks, to the parts possessing superficial water-bearing strata, as at Chelsea, Kensington, and Hammersmith in the west; at Clapham and Camberwell southwards; Bow and Hackney eastwards; and northwards at Clerkenwell, Bloomsbury, Marylebone, and Paddington. Here and there only, beyond the main body of the gravel, there were a few outliers, such as those at Islington and Highbury, and there houses were to be found. The clay area of Camden Town, Kentish Town, Maida Vale, Kilburn, and other tracts north of King's Cross and Marylebone, were not populated until a supply of drinking-water from a distance was brought in conduits.

Within the City itself, as the population[2] gradually

[1] Address to Geol. Soc., 1872, *Quart. Journ. Geol. Soc.*, vol. xxviii. p. liii.

[2] With all his fulness of detail, Stow makes no attempt to sum up the number of inhabitants. Some notion of the size of London in the Middle Ages may be formed from contemporary writers, from whom it appears that in 1199 London had 40,000 inhabitants. A century and a half later—namely, in 1349—the number could not have been more than 50,000, this estimate being in keeping with the returns of the poll-tax in 1377 (Subsidy Rolls). During the fourteenth and fifteenth centuries there was no very appreciable change, but in Elizabethan London the increase was considerable; in a normal year like 1580, the baptisms were one-fourth more than the burials. Under the Stuart Kings the population increased still more rapidly, partly due to the influx of people from the country and abroad,

increased, a plentiful supply of wholesome water was more than ever needed, and consequently the citizens, as Stow expresses it, were "forced to seek sweet waters abroad." In London, as in other cities, the obligation of furnishing water rested with the Corporation. Accordingly, in the 20th year of Henry III. (1236) they obtained leave to construct conduits, bringing water from springs in the Manor of Tyburn, at that time belonging to Gilbert de Sanford, on the site now known as Stratford Place, Oxford Street. Royal letters patent, bearing date 1236, set forth that this grant was "for the profit of the City, and good of the whole realm thither repairing: to wit, for the poor to drink, and the rich to dress their meat"—quaint terms which often recur in subsequent documents alluding to the Tyburn source of supply.

City records mention the Tyburn Conduit (la funtayne de Tybourne) in the year 1237, when a convention or compact was entered into between the citizens of London and merchants of Amiens, Corby, and Nele, in Picardy. In return for the privilege of landing and warehousing woad and other commodities within the City, which, until the compact of

who filled up the gaps made by the "plagues," so that the population in 1661 from the contemporary estimate of Graunt was 460,000, though only one-fifth of this amount—namely, 92,000—was in the City within the walls; the rest was distributed in the larger out-parishes and liberties. (See "The Population of Old London," by Dr. C. Creighton, in *Blackwood's Magazine*, April, 1891.) Gregory King's estimate for 1694 is 530,000, but probably subject to the same distribution as Graunt's; Richman (1701) 674,000; and Maitland (1738) 726,000.

1237, they could only sell on board their own vessels, the merchants, besides an annual payment of fifty marks, gave £100 sterling "au Conduyt del ewe (de l'eau?) de la funtayne de Tybourne amener de la cité de Loundres"—then in course of building.[1]

Many conduits,[2] as Stow and others call them (but more properly conduit-houses), were set up in various thoroughfares. There were in all nine conduits or bosses [3] in different parts of the City, but until late in the sixteenth century they were all on the western side of the Wallbrook; east of that stream, the City was supplied by wells, especially by one opposite the future site of the Royal Exchange. The "Anglo-Norman Chronicles of London" (p. 237) mention one of these conduits in the following passage: "This year (1273–74) came King Edward I. and his Wife from the Holy Land, and were crowned at Westminster on the Sunday next after the feast of the Assumption of Our Lady (August 15th); and the Conduit in Chepe ran all the day with red and white wine to drink, for all such as wished."

The Accounts of the "Masters" or Keepers of the Great Conduit in Chepe for the year 1350

[1] Liber Custumarum, pp. 64–66.

[2] In early writings and records "conduit" is used in a double sense, meaning both the channel or pipe for the conveyance of water and the structure from which it was distributed or made to issue.

[3] Stow tells us that Boss Alley in Lower Thames Street was so called from "a bosse of spring water, continually running, which standeth by Billinsgate against this alley." This and another by St. Giles's Church without Cripplegate were built about the year 1423.

touch on many points of interest.[1] They show that the conduit was maintained and kept in repair by a rate levied on the houses of Chepe and the Poultry, and that this rate, for two years' consumption, varied from 10s. to 13s. 4d. The masters also account for having expended various sums for mending pipes; for cleansing and washing the fountain-head; for closing and opening the Conduit (which was doubtless closed and locked up at night); hire of two vadlets[2] twenty-four days to collect the money for the tankard, each man receiving 6d. per day. The pay of the workmen was 8d. per day, with a penny for drink. These donations for drink to workmen are called in Letter Book G, fol. iv. (27th Edward III.) "none-chenche," meaning probably "noon's quench."

The Conduit of London, which apparently was not distinguished as the "Great" Conduit until the building of the "Little" Conduit, is named also in a grant made by "Alice, late Wife of William de Chobham (Cobham) of the Vill of Tybourne to Adam Fraunceys, Mayor, and the Commonalty of the City, and their successors, of a parcel of land 24 feet square, situate atte Cherchende in the said vill of Tybourne, to serve for a fountain-head to the Conduit of London, together with a right to dig, lay cisterns and small subterranean ways under 40 feet of her land, adjacent to the aforesaid parcel of land." The deed is dated February 20th, 28th Edward III. (1355). Rymer ("Fœdera," xi. 29) contains a copy of the

[1] Riley's "Memorials," pp. 264, 265.

[2] Vadlet, a superior servant.

grant, and there is a reference to it in the Liber Albus, Letter Book G, 181.

The Great Conduit was situate at the Poultry end of Cheapside, opposite Mercers' Hall and Chapel—a spot which had been previously occupied by the hospital of St. Thomas de Acon. In appearance it was a long and low stone building, battlemented, and enclosing a large leaden cistern, the water of which issued from a cock into a square stone basin at the eastern end. It is generally said to have been built about the year 1285, but it is mentioned as the Conduit in St. Mary Colechurch in West Cheape in 1261 (Cal. Charter Rolls, ii. 38), and again in an allusion to the fraternity of St. Thomas the Martyr "at the Conduit of London," in 1278 (Cal. Wills, i. 29, 70). The first building of the conduit, authorised in 1236, was begun in 1245 (Ann. Lond., 44).[1] The pipes conveying water to the Great Conduit were, according to Stow, laid in sections from Paddington to Cheapside (the details of the route are given in subsequent pages in the account of the Bayswater Conduit). In the year 1479, the 19th Edward IV., the Great Conduit was rebuilt and enlarged by Thomas Ilam, one of the sheriffs.

In the 14th year of King Richard II. (1390) certain "substantial men of the Ward of Farndone (Farringdon) within, and other citizens of London, for the common advantage and easement of the same, at their own costs and charges," decided to build a water-conduit near to the Church of St. Michael-le-Querne in the West Chepe, to be supplied by the

[1] Stow's "Survey," text of 1603, C. L. Kingsford 1908, vol. ii., Notes p. 331.

great pipe of the conduit opposite to St. Thomas of Acon.[1] Permission to do this was granted by the Mayor and Aldermen, provided that the pipes should not be injurious to the Great Conduit (for which three citizens gave security), but if they proved to be harmful, then the said pipes should be removed, &c.

Half a century later the Little Conduit was built. Stow relates the circumstances in these words: "At the east end of this Church (of St. Michael-ad-Bladum, or at the Corne[2]—corruptly at the Quern), in place of the olde Crosse, is now a water conduit placed. William Eastfield, Mayor, the 9th of Henry VI. (1431) at the request of divers Common Councels, granted it so to be; whereupon in the 19th of the same Henry, about the year 1442, one thousand marks was granted towards the works of this Conduit, and repayring of the other Conduits: this is called the little Conduit in West Cheape by Powles (Paul's) gate."

On part of the site of the Church of St. Michael, after the Fire of London in 1666, was erected a conduit for supplying the neighbourhood with water; but being found unnecessary, it was, with others, pulled down in 1727.

The Little Conduit by the Stocks Market was built about the year 1500. Stow says: "Some distance west is the Royall Exchaunge . . .

[1] The Hospital of St. Thomas of Acon (or Acre) was surrendered the 30th of Henry VIII. (1539) and purchased by the Mercers; it was used in Stow's time as a chapel and free grammar school.

[2] So called because there was at one time a corn market here, stretching westwards to the Shambles (Newgate Street).

and so down to the little Conduit . . . by the Stockes Market, and this is the south side of Three needle Street."

> "Come along presently by the p—g-Conduit,
> With two brave drums and a Standard bearer."[1]

In "Henry VI.," Pt. 2, Act IV. Sc. vi., Cade says: "Now is Mortimer lord of this city. And here, sitting upon London-stone, I charge and command that, of the city's cost, the p—g-conduit run nothing but claret wine this first year of our reign."

The appearance of the buildings in the neighbourhood, and of the Little Conduit, in the sixteenth century, are represented in a curious plan of the western end of West Cheap, dated 1585, a copy of which is in Wilkinson's "Londina Illustrata" (1819); the age of its erection and decoration, that author observes, is expressed by the royal supporters of Henry VI. and his Queen, Margaret of Anjou—the antelope and eagle with the Tudor dragon—on the heads of the buttresses.[2] The plan also exhibits the direction of the pipes laid for the supply of both the reservoirs in West Cheap, the Little Conduit being probably also furnished from the same springs at Paddington. The tower at the north-west corner of this building was perhaps intended for raising the

[1] Middleton, in "A Chaste Maid in Cheapside," Act III., Sc. ii.

[2] According to the best authorities, Henry VI, had for supporters two antelopes argent. There is no mention of either eagle or dragon among the badges or cognisances of this king and queen. The heraldic figures on the buttresses may have been added in a later reign.

water to the height of its original level, whence it fell down again into the cistern in the larger building. Two spouts or taps are shown from which the water could be drawn, and round the base of the structure are represented several of the ancient London water-tankards.[1] The Little Conduit was partly re-erected or preserved, since Strype[2] says: "Where the church of St. Michael-le-Querne stood (it was burnt down by the Great Fire and not rebuilt) is a Conduit, not yet finished, but designed for some magnificent structure." The following further notice of this building appears in the "Magnæ Britanniæ Notitia," by John Chamberlayne:[3] "The obelisk in Cheapside is a piece of work designed and begun to be erected by the City at the west end of Cheapside, where, before the Fire of London stood the Church of St. Michael-le-Querne. It is to be, if finished as was intended, an obelisk upon a pedestal, the height to be 160 feet, and made in imitation of those formerly in Rome." In the 31st Edition of Chamberlayne's work (1735) this passage is wanting, which probably points out the time when the idea of erecting any building upon this spot was finally abandoned. Besides the two conduits in West Cheap there was also a third public reservoir in the same street called the "Standard," the site of which was in the centre of the road opposite the end of Honey Lane. The original object of the Standard appears to have been a monument erected at the place for public executions, of which Stow gives several

[1] "Londina Illustrata," R. Wilkinson (1819), vol. i.
[2] Strype's "Stow's Survey" (1720), vol i., chap. viii.
[3] 29th Edition, 1728, Pt. I. bk. iii. p. 251.

instances between 1293 and 1461.[1] In 1430 John Wells, Mayor, caused it to be furnished with "a small cistern of fresh water, having one small cock continually running, when the same was not turned or locked." His design was finished by his executors, who bought a licence of Henry VI. to convey water to it. The Standard of that period was almost unquestionably of wood, the King's patent, issued in 1442, for the rebuilding of it, with a conduit in the same, stated that it should be strongly built of stone. Its appearance in the seventeenth century is shown in the picture representing the procession of Marie de' Medici through Cheapside, when she came to visit her daughter, Henrietta Maria, Queen of Charles I., in 1638.[2] It is possible that the figures with which the Standard is decorated were erected for the occasion, since the Cross and Conduits of West Cheap were always anciently utilised as stations for pageants[3] in the triumphs, shows, and royal processions, called "ridings," through the City. Hence we find that of the six pageants displayed in celebration of King Henry V.'s home-coming after Agincourt (1415), two were on London Bridge, one at the conduit in Cornhill, another at the Great Conduit in Cheap, a fifth at Cheap Cross, and the sixth at the Little Conduit. The roofs of the conduits, which were

[1] Strype's "Stow," 1720, chap iii. 35.

[2] From La Serres' "Entrée Royalle de la Reyne Mêre du Roy très Chrestien dans la Ville de Londres," 1638.

[3] The original meaning of pageant has become obscured through being used to express the play itself, whereas it was really a movable stage or platform on which the play was presented. The "pageants" consisted of buildings of timber, sometimes in imitation of brickwork.

generally either castellated or enclosed by an ornamental gallery, were usually filled with choristers or minstrels. John Lydgate, who was deviser and writer of verses for Court and civic ceremonies in the first half of the fifteenth century, and whose verses give one of the best descriptions of a mediæval civic pageant, wrote a poem (it was really an official programme in verse) on the occasion of King Henry VI.'s reception in London, in February, 1432, on his return from France. The Great Conduit is alluded to in the following extract :—

"The King fforth rydyng entryed into Chepe anoon,
A lusty place, a place of all delytys,
Kome to the conduyt, wher, as crystal stoon,
The water Ranne like welles of paradys,
The holsome lykour, ffull Riche and off greate prys,
Like to the water of Archedeclyne,[1]
Which by miracle was turned into wyne." [2]

Cheapside, meaning market-place, was in those days a large square, reaching back as far as the present Honey Lane and other streets in a straight line with it, and with booth-lined streets branching away as far as the Guildhall and Basing Hall. All through the Plantagenet times, "the golden age of chivalry," the great square of the "Chepe" was the scene of tournaments and martial pageants.[3]

[1] Archedeclyne—erroneous form of Architricline, the triple couch of a banquet-room. The "ruler" of a feast.

[2] "Chronicles of London," edited by C. L. Kingsford, 1906, in which the poem is printed *in extenso*.

[3] "Mediæval London," Benham and Welch, 1901.

Numerous instances of these pageants, with references to the original authorities, will be found in Nichol's "Account of Fifty-five Royal Processions and Entertainments in the City of London" (London, 1831, 8vo).

Catherine of Aragon's state entry into London on November 12, 1501, is thus described in the quaint language of the time. Having listened to benedictory orations, delivered by two personages representing St. Catherine and St. Ursula, at London Bridge, "Dame Kateryn rode fforth to ledenhall corner, and there turned down to the Conduyt in Cornhill, where was ordeyned a costlew pagent w^{t} a volvell, by the which the Xij signes moved about the zodiak, and the mone shewed her course and dirknesse," &c,

The conduits were sometimes made to subserve the purposes of moral instruction. When James I. passed through the City on his accession the conduits were decked out with verses, such as these, which are selected from a scarce and curious black-letter duodecimo, printed in 1607;—

Upon the conduit in Cheapside were these verses :—

> "Life is a dross, a sparkle, a span,
> A bubble: yet how proud is man!"

Upon the conduit in Grateous (Gracechurch) Street :—

> "All in this world's Exchange do meete,
> But when death's burse-bell rings, away ye fleete."

Gifts or benefactions, such as that already mentioned of John Wells, who furnished a cistern for the Standard in West Cheap, and of William Eastfield, who made provision for the Paddington conduit, were not uncommon; they sometimes distinguished a term of office, or were given in charity. Posthumous gifts were also occasionally

made. Stow notices a bequest by one John Pope, citizen and barber, who by his will, dated May 11, 1437, gave for the reparation of the Great Conduit, and the other conduits in the City, his tenement "with the appurtenances which by right descended to him." Another benefactor, William Love, bequeathed the sum of 10s. "annual quitrent charged on tenements in Ismongerelane in the parish of St. Martin Pomer (Pomary) to the work of the Conduit of London; the Will of the said William being enrolled in the Husting for Pleas of London held on Monday after the feast of the Purification (of the) B.M." (February 2nd), 2nd Edward III., 1327–28.[1]

The Tonne, or Tun,[2] upon Cornhill, Stow states, was built in the year 1282 by Henry Wales (Wallis), Mayor of London in that year, as a prison for night offenders. In 1401 it was "cisterned" on being turned into a conduit. Some years before this, namely, in 1378, a meeting of the Common Council was held at Guildhall to consider (among other matters) the best means of carrying out the repair of the conduit in Chepe, and carrying it up to the cross-ways on the top of Cornhill, for which purpose the executors of Adam Fraunceys had promised to contribute

[1] Calendar of Wills, i., 330.

[2] Thornbury ("Old and New London," ii. 169) reproduces a view of Cornhill in 1630, published by Boydell, showing the first Royal Exchange and a cylindrical Gothic structure standing in the middle of the street, which is the Tun. It was so called, Stow says, because it was built somewhat in the fashion of a tun, or barrel, standing on one end. There is another print of the Tun in the Gardner Collection, which is reproduced in Besant's "Mediæval London," 1906, p. 355.

THE TUN UPON CORNHILL (*CIRCA* 1630).

After a print in the Guildhall Library.

To face p. 262.

500 marks. This seems to refer to the fitting up of the Cornhill conduit, probably identical with the Tun.

In one instance—in the year 1432—a great conventual house—"Nostre Dame d'ordre de Charthous"—within the City walls, provided a water-supply of its own. Two years previously—in 1430—John Ferriby and his wife Margery enfeoffed the Prior and Convent of the Carthusians of a certain well-spring in the meadow called Overmead, in the town of Islington (en la vill' de Iseldon), to make an aqueduct at the rent service of 12d., together with a certain piece of land, at a spot marked approximately in later times by a building known as the White Conduit House.

CHAPTER II

CONDUITS WITHOUT THE CITY

The White Conduit—Supplied water to the Carthusian Friars—Fleet Street—Its water-supply—Fleet Street Standard—Cistern made to receive its overflow—Thames water used by Londoners—Springs in Paddington granted by the Abbot of Westminster to the Mayor and citizens of London—Water from springs at Hackney—Banqueting House on the site of Stratford Place, with cisterns in the basement—Lamb's Conduit—References to the conduits in the Letter Books—Keepers or wardens to look after them—Measures taken to restrain keepers of brew-houses and others from making ale with the water from the conduits—Tynes and tankards used for conveying water—Grants of Quills—The London Waterbearers—Their petition—Waterbearers' Hall—List of conduits removed—The Standard in Cornhill a point of measurement for distances from the City—Explanation of a complete service on the Conduit System.

THE stone conduit from which the house of entertainment—a kind of minor Vauxhall for the Londoners who went for cakes and cream to Islington and Hornsey—took its name appears, from all accounts, to have been an arched structure, built with stone, brick, and flint, and cased with white stone, from which it received its appellation of the White Conduit. A sculptured stone over the door bore the date 1641 and the initials and arms of

Thomas Sutton, who founded the Charterhouse as a school. Sutton was obviously only the restorer of this little edifice, for long antecedent to his time the water had flowed hence to supply the wants of the Carthusian Friars. The building remained much in the state represented in a print in the *Gentleman's Magazine* of May, 1801, till about 1812, when it was suffered to fall into decay, being gradually stripped of its outer casing, and at last it was entirely destroyed in 1831, to make way for the completion of some new buildings in Barnsbury Road, as a continuation of Penton Street, formed some five years previously. The materials were used to repair part of the New Road. Cromwell, who also incorporates some of Malcolm's information, says ("History of Clerkenwell," p. 438), "The original spring issued from the ground at the distance of 43 perches north from the Conduit House, and was conducted into the latter by a brick channel, which was discovered a few years since by the builders of the houses since erected all around. In the conduit was a massy cistern with an aperture at the bottom for carrying away the waste water." His remarks are referable to the year 1827.

The place where the conduit stood when Mr. T. E. Tomlins wrote his "Perambulation of Islington," about 1858, was the back of a house occupied as a pawnbroker's shop—No. 10, Penton Street—at the corner of Edward Street. A view of the conduit when in the last stage of neglect (1827), by Mr. J. Fussell, is given in Hone's "Every-Day Book" (vol. ii. p. 1202).

The water-supply of Fleet Street was anciently drawn, in part at least, from the "holy" wells of St. Clement and St. Bridget. Early notice of the regular

supply of this street occurs in the City records[1] in 1388, when the inhabitants complained that the pipes burst and the water found its way into their houses, flooding their cellars and damaging their goods and wares. They urged that the pipes should be covered, and licence was accordingly granted by the Mayor and Aldermen to build a pent-house (*pinaculum*) at a given point of the aqueduct, "opposite to the house and tavern of John Walworthe, vintner, which are situate near to the hostel of the Bishop of Salisbury."[2] Walworthe, John Rote (the Alderman of the Ward), and some twenty others were the applicants.

The construction of the main from Paddington[3] having been abandoned for six years or more, the executors of Sir William Eastfield obtained licence of the Mayor and Commonalty in the year 1453, and with the effects of Sir William took the work in hand and completed it by 1471, together with the conduit by Aldermanbury Church, not far distant from his dwelling-house. With the same powers his executors also conveyed water to Cripplegate.

The Fleet Street Standard stood a little to the west of Shoe Lane. Over the cistern Stow describes a stone tower, ornamented with "images of St. Christopher on the top and angels round about, with sweet-sounding bells, which hourly with hammers chymed such an hymn as was appointed." To receive the

[1] Letter Book H, p. 326.

[2] The Inn or London House of the Bishops of Salisbury stood on the site of Salisbury Court, on the south side of Fleet Street.

[3] Portions of the pipes were dug up in Fleet Street in 1743, and by St. Clement's Church in 1765.

overflow of the Standard a cistern was made at Fleet Bridge in 1478 "by the men of Fleet Streete," but Stow adds: "The watercourse is decayed and not restored."[1] The Standard was rebuilt, with a larger cistern, at the City's expense in the year 1582; it was destroyed in the Great Fire.

It must not be supposed that Londoners had only the conduits on which to depend; the river Thames was also freely drawn upon: the water-carriers, besides filling their tankards from the conduits, used the river-water to supply the houses of citizens for a small remuneration. The carts also conveyed water in still greater quantities from the Thames. In the City ordinances made after the year 1275, but probably before the Great Conduit in Cheapside was opened,[2] there is a regulation that for carts taking water from Dowgate or Castle Baynard to Cheap the charge should be three halfpence; if they went beyond Cheap two pence; if they stopped short of Cheap one penny farthing (Liber Albus, i. p. 730). In one year—1325–26—it is recorded in the Anglo-Saxon Chronicles of London (p. 261) that, "for want

[1] For surreptitiously tapping the conduit where it passed his door, and conveying the water into a private well, thereby causing a lack of water to his fellow-citizens, civic records relate that William Campion, of Fleet Street, was in 1478 sentenced to imprisonment, and was further punished in the following mediæval fashion: Being set upon a horse, a vessel like unto a conduit was placed upon his head and kept filled with water, which ran down his person from small holes made for the purpose, keeping him continually drenched. In this condition he was taken round to the City conduits, where his offence was proclaimed, as a warning to other citizens.

[2] The conduit is mentioned in Letter Book B, 6th Edward I. (1277–78).

of fresh water, the tide from the sea prevailed to such a degree that the water of the Thames was salt; so much so that many folk complained of the ale being salt." Unless care were taken to take water from the river at certain periods of the ebb tide, and some distance from the bank, a similar complaint might have been justly made at any time. But the ever-recurring trouble which had to be contended with was the pollution of the Thames from accumulations of filth on the river-bank. This was the subject in 1357 of a peremptory letter to the Mayor and Sheriffs from the King (Edward III.). Various civic ordinances and enactments in Parliament tend to destroy one's faith in the general purity of the river and its fitness for drinking. There were penalties for casting refuse from stables and slaughter-houses into it, the Thames water at Dowgate Dock becoming at this time so corrupted by filth thrown there that the water-carriers accustomed to fill their tankards from this dock "were no longer able to serve the Commonalty, to their great loss." Orders were therefore given for cleansing the dock (Letter Book F, 19th Edward III., 1345).

In the fifteenth century there is further evidence that the water-supply of London was a subject of concern to the Corporation. On March 11, 1439, Richard, Abbot of Westminster, granted to Robert Large,[1] the Mayor, and citizens of London, and their successors, one head of water, together with certain springs to the north and west of the same head, within a length of 26 perches, and a breadth of

[1] A mercer, who will always be remembered as the master to whom Caxton served his apprenticeship.

1 perch, in a certain close called Oxlese, within the manor of Paddington, in consideration of the City paying annually to the said Abbot and his successors, at the feast of St. Peter ad Vincula, two peppercorns. This grant was confirmed by Henry VI. in the year 1442, and likewise a writ of Privy Seal issued allowing the citizens power to impress the necessary labour and to purchase 200 fodders (a fodder of lead being about a ton) of lead for the intended pipes or conduits. In the next century additional conduits were constructed by the Corporation in different parts of London: the conduit at Bishopsgate, built about the year 1513; that at London Wall, against Coleman Street, about 1528. Without Aldgate, long known for its pure water, a conduit was built in 1535 by means of a grant of money from the Common Council: the source consisted of two heads, situated in fields near Dalston, whence it was conveyed by pipes laid in the ground at depths varying from 8 to 18 feet, till they terminated at the Conduit.

In 1543 the municipal authorities obtained statutory powers to repair damaged Conduits and erect new ones, as well as to bring water to the City from Hampstead (Stat. 35 Henry VIII. c. 10). This was London's first Water Act.[1] It was entitled an Act "Concernynge the repayringe, making and amendynge of the Condytes in London." But the water yielded from the above and other sources, old and new, proved inadequate, for such was the insanitary condition of the City that the water problem was taken seriously in hand by the Common Council

[1] The city of Gloucester obtained its Water Act two years earlier.

towards the close of the year 1545, when Sir Martin Bowes entered upon his mayoralty. A tax of two-fifteenths was imposed upon the inhabitants of the City for conveying water from certain "lively sprynges" recently discovered at Hackney. In fact, the City authorities appear from that time to have taken more active interest in water-supply. According to Stow, it was their custom to pay annual visits of inspection to the various Conduit-heads, and on an occasion, cited by him, in 1562, the Mayor (Harpur), Aldermen, and many "worshipful persons" of the twelve livery Companies, rode on horseback to the Conduit-head at Marybone with great formality and parade, their wives making the journey in wagons. Here, after inspecting the reservoirs, they were entertained with good cheer by the City Chamberlain in a banqueting-house erected on the site of Stratford Place[1] for their convenience, after which they hunted a fox in the neighbouring woodlands. The old cisterns, which were in the basement beneath the Banqueting House, being no longer wanted, were, in 1737, arched over and abandoned. The house itself was pulled down and its site let on lease.

Notwithstanding the official recognition shown by these formal visits, the efforts of private individuals in attempts to improve the City's water-supply were by no means discouraged. The scheme of William Lamb entitles him to particular notice. He is usually described as a gentleman of the Chapel Royal to

[1] In August, 1875, while making repairs or alterations in the roadway of Oxford Street at this point the workmen came upon the reservoirs and arches under the Banqueting House, which had remained in a fair state of preservation.

Henry VIII.; he was also a freeman of the Cloth-workers' Company. Among many other benefactions he generously undertook the charge of bringing water collected from several springs in leaden pipes a distance of about 2,000 yards to Snow Hill, where, in 1577, he rebuilt a conduit, standing a little below the Church of St. Sepulchre—at Oldbourne Crosse (Stow)—which had long been in a ruinous state, and disused, at a cost of £1,500. This conduit was again rebuilt in 1667 from a design by Sir Christopher Wren, consisting of a stone building of four sides, with four columns, over which was a pediment, surmounted by a pyramid, on which stood a lamb—a rebus on the name of Lamb.

The public-house known by the sign of the "Lamb" at the north-east end of Lamb's Conduit Street is distinguished by the appropriate effigy of a lamb cut in stone, which the writer of an article in the *Illustrated London News* of November 22, 1851, concluded to be no other than the one which stood upon the conduit. The same writer discovered in the yard of the public-house a trap-door in the pavement, which on being lifted led by a short flight of steps into a brick vault, where was to be seen the wooden cover of the well and beneath it the well itself. The "New View of London" (1707), compiled, it is believed, by Hatton, describes the fountain-head of Lamb's Conduit as being in the vacant ground a little to the east of Ormond Street.

The conduit was taken down in 1746. A pump, which was reputed to be erected on the Conduit-head, probably in the year just mentioned, stood against the corner house of a small turning leading out of

Lamb's Conduit Street, "on the right-hand side as you go towards the Foundling, known as Long Yard." Carved on the gable of one of the houses was the inscription: "Lamb's Conduit, the property of the City of London. This pump is erected for the benefit of the public."[1] The date became obliterated.

A charge was always made for water supplied by conduits when used for trade purposes. In the "Letter Books" are many references to the conduits, and particularly to their management. It appears from these that Keepers or Wardens were appointed to look after them. Such officers were, after being duly elected, admitted and sworn in the presence of the Mayor of London and the Aldermen, to faithfully collect the money left to, or acquired by, the conduit, and to render true account thereof when called upon. The custodian had also to receive the money assessed upon traders, such as brewers, pastelars (cooks), and fishmongers; to see that the water was not wasted, and to take no fees or gratuities, or sell water for private profit, on pain of losing his freedom. The guardianship thus created was evidently very necessary in the interests of the consumer. In the Liber Albus there are several entries between the years 1309 and 1316 and subsequently, showing that the City brewers

[1] *Notes and Queries*, April, 1857, 2nd Series. In October, 1905, while cutting a cross-trench in connection with the work of the electrification of the tramway lines in Theobald's Road, the workmen came upon a length of about 12 feet of an old wooden water-conduit in excellent preservation. It was thought to be probably a part of Lamb's Conduit. The pipes had been made out of tree-trunks with a bore of about 9 inches. (The *Standard*, October, 1905.)

took so much water from the Great Conduit that the supply of their fellow-citizens ran short. As a consequence of this a "plaint" was made in the 11th year of Edward III. (1337) in the Hustings Court by certain persons living near the Conduit, that "men who keep brew-houses in the streets and lanes near the Conduit, send day after day and night after night, their brewers with their tynes, and make the ale which they sell with the water thereof." In the year 1345 the Mayor and Alderman agreed, the Commonalty assenting, that such brewers should in future no longer presume to brew or make malt with water from the conduit, on pain of losing the tankard or tyne with which he shall have carried water from the conduit, and 40d. the first time; the tankard or tyne and half a mark the second time; and the third time the tankard or tyne and 10s.

The means of obtaining water from the conduits consisted either in employing water-carriers, called in those days "cobs,"[1] to bring it, or in sending servants to fetch it; the latter could, of course, only be done by the wealthier citizens. The tyne, or vessel for holding the water, was a wooden tub formed in the ordinary way with staves and hoops; the tankard contained about three gallons and was shaped like a cone; it had a small iron handle at the upper (narrow) end, and, being fitted with a bung or stopple, was easily carried on the shoulders. In a

[1] Oliver Cob, the water-bearer, is one of the characters in Ben Jonson's play, "Every Man in His Humour" (1598), and the sort of coarse repartee he indulged in may be taken as a fair sample of that used at the London conduits. The water-carriers resided chiefly in Cob's Court, Broadway, Blackfriars, and this is probably how they came to be called "cobs."

rare print executed in the reign of James I. and preserved in the British Museum, reproduced by J. T. Smith in "Cries of London" (1839), the water-carrier is shown bearing the tankard upon his shoulder. He wears the dress of Henry VIII.'s time, and to keep him dry coarse aprons hang from his neck, one in front and one behind. In Tempest's "Cryes of London" (1711) is an engraving of a water-bearer, with the words "New River Water" inscribed beneath the picture. He carries two tubs or tynes suspended from a yoke on his shoulders. Besides being carried by hand, the water was also conveyed by barrow and by cart. As the supply of water grew scarce through the laying down of pipes or "quills" of water to private dwellings, there were frequent disputes among the cobs for precedence in filling their vessels, and the Mayor forbade them to take clubs and staves, with which they would sometimes belabour each other. A curious print—published about the time of Elizabeth—is a satire on this custom; it is entitled "Tittle Tattle," and tells in homely couplets how—

> "At the conduit striving for their turn
> The quarrel it grows great,
> That up in arms they are at last,
> And one another beat."

While the citizens generally obtained water from these public fountains, some noblemen and other persons having mansions in the City or near the course of the conduit from Tyburn obtained leave to lay a small pipe or "quill" (probably, as the name implies, not exceeding a goose-quill in diameter)

connecting the conduit with their mansions or grounds. An instance of this occurs in 1582, when the Marquis of Winchester applied to the Mayor for leave to substitute a brick vault for the passage of water in place of the old pipes, which had decayed. Other similar applications were made: in 1592 by Lord Cobham, for a quill of water from the conduit at Ludgate for use in "his house within the Blackfriars"; in 1601 by Lady Essex and Lady Walsingham for "a continuance of the pipe of water formerly granted to the Lord Admiral for use in Essex house"; and in 1613 by Lord Fenton for his house near Charing Cross. The last records of these applications to tap the City Conduits are of 1662–64.

As grants of "quills" conferred privileges which brought no revenue to the Corporation, while the common stock of water was diminished, popular murmurs against the practice arose, the cause being taken up by the Company of Water-Tankard-Bearers. Following the example of the other crafts that flourished in the Middle Ages, the water-carriers of London, a numerous body of men, formed themselves into a guild or fraternity. Their rules and ordinances are dated October 20, 1496, the 12th of Henry VII., and purport to have been framed by "the Wardens and the whole fellowship of the brotherhood of St. Christopher of the Waterbearers, founded within the Augustin Friars." A curious petition,[1] bearing no date, but, judging from the writing and spelling, probably drawn up about the close of the sixteenth or the beginning of the seventeenth century, was

[1] Mr. Clifford gives it without abridgment, "A History of Private Bill Legislation," vol. ii., 1887, pp. 59–61.

presented to the House of Commons from "the whole Company of the poore Water-Tankard-Bearers of the Cittie of London, and the suburbs thereof, they and their families being 4,000 in number," &c. Their grievances are set forth at considerable length in the petition, which begins by referring to an Act of Parliament of 35th Henry VIII. (1543) concerning the making and repairing of the conduits of London, with a proviso that it should not be lawful for any person to undermine, minish, withdraw, or abate any spring from its "dew" course and conveyance to the conduits in London. Yet, the petition goes on to declare, that "notwithstanding the said Act, most of the water is taken, and kept from the said Conduits in London by many private branches and cockes, and laid into private dwellings, being suffered also to runne at waste, to the general grievance of citizens, and all others repairing to the same, having their meat dressed with other waters, neither so pure nor holsome as the Conduit water is." The City's Plumber, one Randoll, seems to have been a delinquent, confessing to having laid fifteen branches or cocks into private houses, and drawn from the conduits. Various other cases of illegal abstraction of water are cited in the petition; the supply of water to Cornhill, Aldermanbury, and Gracechurch Street Conduits being either wholly stopped or given to private houses by the way. The effect of these irregularities was to deprive the water-carriers of much of their legitimate employment, so that their complaints were well founded.

The petition, in quaintly worded phrases, takes one, as it were, behind the scenes, showing, from the

workman's point of view at least, how the City was served by a body of men who followed a calling which, like others, was not without its grievances. It would be interesting to know what was the result of the petition, whether it effected its object, or, like others of its kind, was consigned to the limbo of unredressed wrongs.

In a list dated February 8, 1582, of deeds, &c., belonging to the parish of St. Michael's, Cornhill, appear several notices of Waterbearers' Hall (now Numbers 143 and 144, Bishopsgate Street Without, between Lamb Alley and Angel Alley). Extracts from the Minute Book of the vestry of St. Michael's (1563 to 1697) show that the Brotherhood of Waterbearers existed at least seventy-two years after their rules were certified by the ecclesiastical authority—that is to say, until 1568, in which year a certain Robert Donkin, Citizen and Merchant Taylor of London, purchased his house of the Company of Waterbearers. The filing of their petition not long after James I. came to the throne proves that they were in existence for at least another half-century, but how much longer remains to be ascertained.

With reference to the state of the conduits in general about this time, Richard Blome, writing *circa* 1673, says: "The greater part of them do still continue where first erected, but some, by reason of the great quantity of ground they took up, standing in the midst of the City, were a great hindrance, not only to foot-passengers, but to porters, coaches, and cars; and were therefore taken down and removed to places more convenient; so that the water was the same. The Conduits taken away with their

cisterns are: the Great Conduit at the east end of Cheapside; the Conduit called the Tun in Cornhill; the Standard in Cheapside; the Little Conduit at the west end of Cheapside; the Conduit in Fleet Street; the Conduit in Grass-Church Street (built in accordance with the will of Thomas Hill, who was Mayor in 1484); the Conduit without Aldgate, and the Conduit at Dowgate." The conduit at the Stocks Market, after its re-erection, appears to have been celebrated principally as being near the equestrian statue of Charles II.; set up in 1672 by Sir Robert Vyner, the convivial Mayor who pulled the King back to the table to "take t'other bottle." Market and statue were both removed for the present Mansion House in 1739. The Standard in Cornhill,[1] built in 1581–82, existed only for a few years after the Great Fire. For some time previously it was in an imperfect state, being sometimes dry and at other times overflowing; for which last condition it was frequently presented as a nuisance by the Inquest of Cornhill Ward, under the names of "the Carrefour"[2] (or Quarrefour), and the "Foure Spowts." It received the first of these names from its position at the intersection of Gracechurch Street, Cornhill,

[1] An engraving of this, dated 1814, is in Wilkinson's "Londina Illustrata." There was a Standard in Cornhill as early as the 2nd Henry V. (1415). ("Chronicle of London," edited by Sir N. H. Nicholas, 1827, p. 99.)

[2] At Aubervilliers (Seine), where, at the meeting of four cross-roads, many crimes have been committed, the spot is popularly called the "Carrefour du Crime." "The Carfukes of Leadenhalle" is mentioned in a proclamation made at the Leaden Hall for men of the poultry trade, in the 49th Edward III. (1375) (Riley, "Memorials, p. 389). The Carfukes of the Leaden Hall was best known as the Standard in Cornhill.

Bishopsgate Street, and Leadenhall Street. The other name was given to it because of four spouts which were directed as many different ways, for the use of the inhabitants living near it, and also for cleansing the channels of the streets diverging from it, namely, north towards Bishopsgate, east towards Aldgate, south towards the bridge, and west towards the Stocks Market. On account of the inconvenience of its situation, this conduit was one of those which was not rebuilt, and the last notice of it is probably the following entry contained in an official manuscript record of the expenses of erecting public buildings in London after the Great Fire, preserved in the Guildhall Library: "1671, July 10, Paid Nicholas Duncome for taking down the Conduit in Cornhill, &c., £15 10s."

That the City conduits were not entirely destroyed by the Great Fire we have the assurance of a contemporary writer—Dr. Samuel Rolles—in his "Relation of the late Dreadful Fire of London in the year 1666" (Meditation XL., "Spoiling of the City Conduits," London, 1667), and he is borne out, as regards one of them, by Evelyn, who records in his Diary, September 7, 1666, only five days after the outbreak, when the ashes were so hot as to burn the soles of his shoes, that the Standard in Cornhill "continued with but little detriment." But there is no doubt that the conduits suffered severely, particularly the leaden pipes and cisterns.

The Standard was long in use as a point of measurement for distances from the City, and several suburban milestones are still inscribed with so many miles from the Standard in Cornhill—*e.g.*, on the south

side of Barnes Common, in the Upper Richmond Road, is one marked "IX. miles from the Standard in Cornhill."[1]

After serving their purpose for more than five hundred years the conduits by about the middle of the eighteenth century had ceased to be used in London. In a few provincial towns they are still in use; at Wells, Somerset, the waterworks of Bishop Beckington continue to supply the city. The springs rise in the garden of the Bishop's palace, in which stands the little fifteenth-century structure, where the waters are gathered, and whence they are conveyed in leaden pipes to a conduit-house in the market-place. An arrangement of a similar kind, though more modern, exists at Cambridge, where the quaint Jacobean structure called Hobson's Conduit now stands at the entrance to the town from the Trumpington road, having been removed from the market-place in 1856.[2] Another conduit-house is mentioned by Parker as having been "erected in Oxford by Otho Nicholson so late as the time of James I., and water to supply it was conveyed by pipes from Hincksey Hill, a distance of about two miles, where the small building for the conduit-head still remains (1859). The conduit itself was removed about the end of the eighteenth century from its original position at Carfax, where four streets meet,

[1] A correspondent writes to the *City Press*, October 23, 1909, that upon a stone let into the wall of an old house in Lewes (Sussex) the following inscription appears: "50 miles from the Standard in Cornhill; 49 to Westminster Bridge; 8 miles to Brighthelmstone" (Brighton).

[2] Philip Norman, on "An Ancient Conduit-head in Queen Square, Bloomsbury," *Archæologia*, v. 56, Pt. 2.

and where it must have been a considerable obstruction to the traffic." [1]

For the sake of clearness it may be useful to explain that a complete service on the conduit or aqueduct system was carried out somewhat on this wise: The conduit-head was placed as near as possible to, if not actually over, the natural spring or springs forming the source of supply. Into this "Receipt-house," as it used to be called, the water was led, filling a cistern or tank in the building, and passing on into the pipes in its course to the distributing base, which might be from one to three or more miles distant. Here the water was stored in a receptacle of greater capacity, and drawn from cocks or taps, as it was required. No mechanical contrivance was used either to raise the water into the cistern or to accelerate its passage through the pipes. All depended upon the very slight downward gradient necessary to ensure a steady flow of water; and indeed this fundamental principle of gravitation was the only known method of water conveyance in the Middle Ages.

It would appear that there is no record existing of the quantity of water which the old London reservoirs were capable of holding. This is regrettable, as it would be of some interest to know, for instance, what was the storage capacity of the great Cheapside Conduit, to which such frequent allusion is made in civic records. Stow, who gives a long list of the City conduits, omits any mention of the point, either directly or indirectly, nor do any of the later historians touch upon it.

[1] "Some Account of Domestic Architecture in England," by T. Hudson Turner and J. H. Parker, vol. iii., 1859.

CHAPTER III

CONDUITS WITHOUT THE CITY (*continued*)—LONDON BRIDGE WATERWORKS

Bayswater or "Roundhead" Conduit—Its position and course indicated—Remarks by Matthews in "Hydraulia"—Mr. Morley Davies on the "Roundhead"—Paddington Conduit System transferred from the City to the Bishop of London and Trustees of Paddington Estate—Ancient conduit in Queen Square, Bloomsbury—Identification of the White Conduit—Conduit near Hyde Park Corner—Conduit-house in Greenwich Park—Underground passages in the Park; their elaborate construction—Wooden water-pipes—Use of tree-trunks for water-pipes abroad—Morice and his London Bridge Waterworks—The engine described—Other schemes for supplying London with water.

THE Bayswater or "Roundhead" Conduit, the earliest Conduit-head, may be taken as a type of its kind. It is mentioned by name as early as 1634, in a petition of the Corporation to the Privy Council.[1] It is there called the "Roundhead near Tyburn," and in a reply from the Council[2] "the Round Head in Oxelees near Paddington." An essay in the *Gentleman's Magazine* for April, 1798, gives a minute description of it—as a building—but what the essayist says as to its situation—"in the fields, nearly equidistant from

[1] "Remembrancia" Index, p. 559, vii. 111.
[2] Ibid., vi. 116.

A. S. Foord fecit.

BAYSWATER CONDUIT.

From the engraving of 1798 in the Guildhall Library.

To face p. 282.

Paddington Church and the tea gardens, which were formerly the botanic gardens of Sir John Hill"—conveys no very clear idea on that point. Of the building and its surroundings several views are extant, drawn with more or less fidelity to the original, if the most careful drawing—that of 1798[1]—be accepted as a guide. Matthews has a lithograph plate of it in his "Hydraulia." Another view of it is preserved in the Crace Collection, two are in the Guildhall Library, and no less than four in the Gardner Collection. The dates of these extend between the years 1796 and 1820, and they all represent a circular building with a conical roof surmounted by a ball. The walls are built of large blocks of stone, fastened together with iron cramps to the brickwork with which they were lined. In the roof the stones overlap like tiles, and there are four small gables with lancet lights; there is one door under a pointed arch, and over this is a panel with the inscription, which appears in a print of 1796 as REP. ANNO 1632. Another panel on the south side bears the City Arms, and the date 1782. Its height was about 20 feet. The water issued from the interior through a wooden pipe at the very moderate rate of 30 gallons an hour. Taking its course under Bayswater Bridge into Kensington Gardens, it supplied the Palace. Lysons,[2] who only refers briefly to this conduit, not being so much concerned with London as with its environs, says: "The water-wheel at Hyde-park wall, near Knightsbridge Chapel,[3] was

[1] This is an engraving in Lysons' "Environs of London," 1795, published August 10, 1798, by N. Smith (Guildhall Library).

[2] "Environs of London," 1795, iii. 331.

[3] Stood on the north side of the main road, a little to the eastward of Albert Gate. Built 1789.

made for the conveyance of this water." He also mentions that the water from the same conduit, "being conveyed by brick drains, supplies the houses in and about Bond Street, which stand upon the City lands."

In 1835 William Matthews[1] wrote with reference to this conduit: "Great as was the solicitude and interest formerly excited by the various conduits, at present scarcely any traces remain to indicate the precise places whence the water was derived that flowed into them. That at Paddington, however, which was the first constructed, still exists, though probably not in its original form, but at a recent period it afforded a plentiful supply to some houses in Oxford Street. The conduit-head, or spring, is situate in a garden about half a mile to the west of the Edgeware Road, and the same distance from Bayswater, within two or three hundred yards of the Grand Junction Water Company's reservoirs. It is covered by a circular building in good condition."

There is an article in the *Saturday Magazine* for May 18, 1844, on the Old London Conduits, the information in which is acknowledged by the writer to be chiefly derived from Matthews' "Hydraulia." Speaking of the Roundhead Conduit, he says: "The sources of the various conduits of London, formerly kept with so much care, have for the most part entirely disappeared. That at Paddington, however, still exists, though probably not in its original form." The words of the last sentence are precisely those used by Matthews, so that Walford and others seem hardly justified in assuming therefrom that the Roundhead existed in 1844, nine years after Matthews wrote.

[1] "Hydraulia," p. 22.

But however this may be, it at all events survived far into the nineteenth century.

The *Builder* for September 4, 1875, contains an interesting reminiscence of the building (reprinted from the *Daily News*) communicated by a Mr. George Musgrave, M.A., who writes: "I am old enough to remember the stone-built conduit-house, from which Conduit passage and Spring Street, Paddington, derive their designation. It stood in a meadow described in an old document in my possession as situate between Paddington Church (close to the Vestry Hall) and the north side of Kensington Gardens; but it will be more correctly pointed out by my stating that it stood on a slanting grassy bank about 100 feet[1] distant from No. 4, Craven Hill, at the back of the line of dwelling-houses bearing that name. . . . I drank of the little rivulet in 1804, and recollect perfectly the haystack-shaped monument (*sic*) overshadowing the stone pipe from which it issued, the security of which was threatened by the roots of a very old pollard elm. When the Craven Hill Estate was parcelled out for building purposes this stone conduit-house was pulled down."

The vexed question of the site is ably discussed in a paper entitled "London's First Conduit System," by Mr. A. Morley Davies, F.G.S.[2] In the section in which he deals with the evidence afforded by maps and plans, he points out that although it might be thought that with their aid there would be no

[1] Walford ("Old and New London," v. 183), quoting from the same, has it, "about a hundred *yards*."

[2] Transactions London and Middlesex Archæological Society, N.S., vol. 2, pp. 9–59 (1907).

difficulty in fixing upon the precise site of the Roundhead, yet this is far from being the case. The plan of 1746[1] in the Crace Collection—to the large scale of about 43 inches to the mile—which is the most detailed of any of the plans relating to the conduits, and the earliest which includes those of Paddington, "may," he says, "perhaps be accurate as regards the measurements from point to point along the line of pipes, but the field boundaries and roads crossed can only have been sketched in the roughest way." While the exact site is, Mr. Davies considers, still an unsettled question, "the most probable site of the Roundhead seems to be on the north-western side of the street now called Craven Road, but originally named Conduit Street, somewhere near its intersection of Westbourne Terrace (built 1847–52), or possibly a little nearer to Paddington Station. This agrees with what may be an indication of the Roundhead on a map of 1824 (Crace Collection, xiv. 4). On no later map can I find any indication of it."

The evidence that the Roundhead Conduit belonged to the Westminster system is contained, as pointed out by Colonel Prideaux, in an entry in the Patent Rolls, dated March 1, 1439, 18th Henry VI., in which the Abbot of Westminster granted a head of water, "in quodam clauso vocato Oxlese infra Terram et Procinctum Manerii nostri de Padyngton."[2]

[1] It is entitled "A Plan of the Drains, Openings, Conduits, Pipes, &c., from the Spring Head at Paddington to the Receipt Conduit," and bears the note—"This Plan was copied from an original Plan drawn by John Rowley for Geo. Dance, December 18, 1746."

[2] The grant then confers the right "to erect all necessary

From the plan of 1746 it appears that the conduit was divided into two branches at the spot where is now Stanhope Place, Connaught Square. One of these branches was carried through Hyde Park, and a surviving witness of it still exists in the shape of the little square conduit-house standing just within the palings of the Park where the buildings of Knightsbridge begin. The main branch, as it may be termed, from the starting-point at the Roundhead Conduit, of "two lead pipes, three inches diameter," ran to Tyburn in a nearly straight line, through enclosed fields. The distance, according to the scale on the plan, is about 3,900 feet. At about 1,500 feet from the Roundhead a "long drain" (for so it is called) begins, and extends past Tyburn, obliquely crossing the main road—Oxford or Tyburn Road—close by the gallows (portrayed on the plan) under the north-east corner of "Hide Park," continuing its course along the south side of Oxford Road (now Oxford Street) to about the site of Park Street, where the drain ends at "Oliver Cromwell's Conduit." The pipes continue past "Ann Wood's Conduit," by the end of North Audley Street, to a point just east of a bridge, and then turn abruptly south-eastwards, when the plan ends. A little further east on the same plan is a large "Receipt [1] Conduit," opposite the end of Marylebone Lane.

cisterns," &c., the inference being that the Roundhead was probably erected about this time, in the fifteenth century.

[1] The word "receipt," as a receptacle for water, was in use in the sixteenth, seventeenth, and eighteenth centuries. It occurs—spelt receyte—on a Plan of Charterhouse Waterworks, c. 1512 (*Archæologia*, lviii., 1902). Bacon uses the word in the same sense in his essay on Gardens (1625).

The route from Paddington to Marylebone is thus clearly marked out on the 1746 plan, but as no map or plan is known on which the course of the conduit pipes between Marylebone and the City is shown, we have to fall back upon the well-known statement of Stow, who makes it quite clear that the direction taken by the watercourse from Paddington was by way of Charing Cross, the Strand, and Fleet Street, and not *viâ* Bloomsbury and Holborn: "The water course from Paddington to James Head hath 510 rods; from James Head on the hill to Mewsgate 102 rods; from the Mewsgate to the Crosse in Cheape 484 rods."[1] The position of James Head is worked out by Mr. Davies from measurements on the maps, and by other deductions, as about where the present St. James's Church stands. "James Head on the hill" seems to him to denote "a fountain-head or spring on the hill above St. James's Hospital (afterwards St. James's Palace), and the site indicated comes just where springs were likely to exist on the margin of the higher terrace of gravel." From James Head the pipes kept for some distance along the edge of the hill, and then turned at right angles down the slope to the Mews. The pipes of the Paddington Springs followed the course of the earlier pipes from Marylebone to the City, the latter passing through "Conduit Mead."[2] The route from

[1] Taking the rod at 19 feet, this is 3,065 yards 1 foot. Mr. Davies gives the distance from Charing Cross to the site of the Great Conduit in Cheapside as 556 perches (or 3,058 yards), which is a fairly close approximation to Stow's measurement.

[2] The name "Conduit Mead" occurs as far back as 1536. Among the lands exchanged between King Henry VIII. and the Abbot of Westminster is mentioned "a close called Brickclose

the Mews, near which was a separall [1] "made against the Chappell of Rounsevall [2] by Charing Crosse," was along the Strand and Fleet Street and up Ludgate Hill. The pipes must, however, have been carried well to the north of the Strand and Fleet Street, or there would not have been a sufficient pressure to carry the water up the rise on the other side of the Fleet.

There were then belonging to the Western System two distinct sources or spring-heads, namely: 1. The original spring from which water was first brought to the City from without its walls in 1236, situated on what is now known as the Stratford Place site; additional springs on or adjacent to the same site being impounded in 1355. 2. The Paddington Springs—first granted to the City in 1439, the works necessary to bring their water to the City not being completed until 1471. The pipes followed the course of the earlier pipes from Marylebone to the City.

Both Strype and Maitland state that in 1703 the City leased the Marylebone conduits to Richard

in the same parish [of St. Martin] between the Close belonging to Eybery [the region of Grosvenor Square] on the west and north and Condet Mede on the east" (State Papers, Henry VIII., vol. xi. (2), 84). The estate is still the freehold property of the City Corporation and forms the site of New Bond Street and Brook Street.

[1] Probably a settling-tank, in which the heavier suspended matter is collected for ultimate removal.

[2] St. Marie Rouncivall. Founded by William Marshall, Earl of Pembroke, in 1222, suppressed as an alien priory after 1432 (Cals. Pat. Rolls, Henry VI., ii. 247), and revived for a fraternity in 1476 ("Mon. Angl.," vi. 677; Cals. Pat. Rolls, Edward IV., ii. 542). It was on the site of the present Northumberland Avenue.

Soams (or Soame), a citizen and goldsmith, for a period of forty-three years at a rent of £700 per annum.

In 1812 the whole Paddington Conduit System passed out of the hands of the City, being conveyed for the sum of £2,500 to the Bishop of London and the Trustees who held the Paddington Estate on lease, and were at that time developing it for residential purposes by virtue of a private Act of Parliament (52 Geo. III. cap. cxciii.).

An interesting monograph by Mr. Philip Norman, published in *Archæologia* in 1899, describes in detail an ancient conduit-head existing in Queen Square, Bloomsbury, which, from the evidence of documents, shows it to have been one of the two sources whence the Franciscan monastery of the Grey Friars (or Friars Minor) drew their supplies of pure water. The register of this great religious establishment is preserved among the Cottonian MSS. in the British Museum, and there is in it a detailed account of its system of water-supply. Guided by this topographical description of the conduit, Mr. Norman was enabled to trace the course of the water-pipes; this, he says, was "under Newgate, close to St. Sepulchre's churchyard, crossing the Fleet River or Hole-Bourne at Holebourne Bridge; up Leather Lane, then a mere track, and thence to the north-west into the open country, till on the land of Thomas de Basynges the nearer conduit-head was reached, whence was drawn the chief water-supply, and finally the little stone house beyond, which encloses the more distant head." In the year 1893 Mr. Norman, in company with three other gentlemen,

two of whom were architects, examined a remarkable tank or well-head in a garden at the back of a house, No. 20, Queen Square, Bloomsbury, which stands immediately north of a passage now called Queen Square Place, but formerly Brunswick Court, so marked on Rocque's map of 1746. The house is rather more than half a mile to the north-west of Leather Lane, Holborn. The masonry forming the structure of the well-head was pronounced by Mr. Norman's companions to be at least as old as the fourteenth, and very probably of the thirteenth, century. The descent to the tank—in plan a square of from 11 to 12 feet—is made by modern steps down to the level of the first arch forming the entrance to the mediæval structure; thence a straight flight of steps spanned by other arches leads to the tank below.

The smaller well or tank (for there were two) may have indicated the site of a spring which still supplies the conduit-head. The whole structure is shown on a plan which accompanies the paper. An examination which Mr. Norman made of the records at Christ's Hospital cleared up all doubtful points as to the identity of the conduit traced by him with that described in the register of the monastery, the passage from which containing the topographical account of the water system he retranslated. From evidence subsequently accumulated Mr. Norman was able to prove beyond a doubt that this structure is in fact the remoter conduit-head specified in the above account. The reports of the committee meetings of the Hospital, Mr. Norman observes, not only showed conclusively that the structure in Queen Square had

formed part of the Grey Friars water system, but also threw a useful light on the later history of the old London conduits. The first Minute bearing on this subject, besides mentioning the conduit-head then in use and therein called the "Chimney Conduit," also refers to a "White Conduit" not far off. The date of the entry is 1661, when Christ's Hospital must already have been getting part of its supply from the New River, for at Michaelmas, 1665, a lease of the "river water" expired, and shortly afterwards the Governors resolved to renew it. In May, 1720, a letter is read at a committee meeting from "Nathaniel Curzon, Esquire (ancestor of Lord Scarsdale), about the Chimney Conduit, alias Devil's Conduit, in Red Lion Fields belonging to the Hospitall." He desires leave to take down the chimney, and instead thereof to place an image on a pedestal of stone with an air-hole at the top. This was agreed to. The site of the Devil's Conduit exactly corresponds with that of the well at back of No. 20, Queen Square, and if this supplied the Hospital it supplied the Monastery also. At what time the Chimney or Devil's Conduit fell into disuse does not appear from the Minutes. The "White Conduit," which Mr. Norman identifies with the "nearest head," as it is called in the monastic register, seems to have lingered on till November 9, 1739, when, according to Minutes, it seems to have been last viewed by the Hospital authorities.

A seventeenth-century conduit, a square brick building, originally faced with cement, of which but little now remains, and having a stone roof, is still standing just within the Park railings, a short distance west of Hyde Park Corner, near where the houses

CONDUIT HOUSE IN HYDE PARK.

From an original drawing by the author.

To face p. 292.

CONDUIT HOUSE IN GREENWICH PARK.

From a photograph taken in 1908.

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begin. It is described as the "Receiving Conduit called the Standard" on a plan in the King's Collection at the British Museum, called "A Survey of the Conduits, &c., to Whitehall, St. James's, &c., in 1718," and various springs or "heads" in Hyde Park are shown to be connected with it.[1] There are no windows as in the Bayswater conduit: in the interior are four recessed round-headed arches, with chamfered edges. The building is 11 feet square, the height 22 feet, and the cubical contents of the iron tank 144 feet, equal to about 900 gallons. The entrance is by a door two steps below the ground-level; a stone tablet above it is inscribed with the initials "G.R." and the date "1820," when doubtless the building underwent some repairs. It has been long disused, and the tank had no water in it when the writer saw it in October, 1908.

A much larger Conduit House is that in Greenwich Park, called the Standard, and as Greenwich is well within the scope of this book a short account may be useful, if only for the purpose of comparison. Its position is on the side of the Park opposite Croom's Hill, about 320 yards from St. Mary's Gate entrance. It is probably a late eighteenth-century building—of red brick and red-tiled roof — and the reservoir supplied Greenwich Hospital. Its use was discontinued early in 1903. The cubical contents of the tank is 1,512½ feet, equal to 9,426 gallons.[2] There

[1] The reservoirs in Hyde Park and the Green Park were supplied by pipes from the Chelsea Waterworks. There was a conduit on the north side of the Serpentine River, of which there is a drawing in the Crace Collection, dated 1796. (Cat., p. 241, No. 26).

[2] From information privately communicated to the writer by Mr. A. Souza, Park Superintendent of Greenwich Park (1908).

was formerly another Conduit-house in the Park, which is figured by Walford ("Old and New London," new edition, vol. vi. p. 168) as it appeared in 1835; this one was abolished many years ago. Two "Park Conduits," probably identical with the above, are mentioned in Hasted's "History of Kent"[1] as being connected with others outside the Park. In a plan facing page 42 in that work, entitled "A Survey of the King's Lordship or Manor of East Greenwich," A.D. 1695, 7th William III., five conduits are marked in different parts of the Park. A road running parallel with Croom's Hill is called in the plan "Conduit Walk"; here are two of the conduits,[2] the remaining three are on the east side of the Observatory.

Besides the conduits, there are several underground passages in the Park, running in different directions, many of them intended for the conveyance of water; one leads from beside the Standard Reservoir to near the drinking-fountain at the top of Hyde Vale; another runs from the hollow ground by Queen Elizabeth's Oak towards Vanbrugh Castle; while a third passes beneath One Tree Hill, a branch from which goes in the direction of Maze Hill House.

[1] Edited by H. H. Drake—continued by Streatfield and Larking, "The Hundred of Blackheath," 1886.

[2] In a book entitled "An Account of the Legacies, Gifts, Rents, &c., appertaining to the Church and Poor of the parish of East Greenwich," by John Kimbell, 1816, the two conduits on the west side of the Park, both of which conveyed water to the Old Palace, are named respectively "The Standard Conduit" and "The Standard"; the position of the latter on the plan seems to coincide very nearly with that of the Standard Reservoir still existing.

Some of these passages must be of ancient date, for "on 3rd February, 1434, King Henry VI. granted to his uncle Duke Humphrey of Gloucester, and Eleanor, his wife, permission to construct a subterranean aqueduct between the house he was building (now the site of the Royal Observatory) and a certain fount in Greenwich called Stockwell (or 'Common Well' as it was termed in early parish deeds) outside the King's highway, which led between the Duke's garden and the Park, and confirmed the same to the Duke and his heirs for ever."

Mr. A. D. Webster, a former Superintendent of Greenwich Park, in a book on the subject published by him in 1902, speaks of the elaborate construction of these remarkable passages; that which originates near the Standard Reservoir, in which two persons can walk side by side without stooping, is 6 feet high and 4 feet wide, is beautifully built of brick, the floor also being paved, while it is ventilated by three shafts, each 6 feet in diameter, which pass to the ground-level above, a distance of between 30 and 40 feet. There is an entrance to this passage on the piece of waste ground between the Ursuline Convent and Hyde Vale, down a flight of wide brick-built steps and well-formed arch-work, with a wooden door, 6 feet high at entrance.

Sir Christopher Wren, about 1700, repaired the underground passages or conduits, and added water-pipes to two at least. Several of the conduits were abandoned in 1732, and the sale of water to the public then ceased.

The method of conveying water in wooden pipes was brought into use after the New River works were

opened, and it seems to have lasted till about the middle of the eighteenth century. In populous centres wood was, however, not the only material used for conduit pipes; stone and brick were sometimes employed. A correspondent in the *Times* of the 25th of April, 1896, noticed that in excavating the road in Bond Street for some purpose, the labourers had turned up some Bath-stone pipes, drilled out of the solid stone. For special purposes the Romans introduced cast-lead pipes; fragments of these have been found in London, and some may be seen in the Guildhall Museum, where they are referred to the Romano-British period. Others, which belong to the seventeenth century, are of red brick, cylindrical in form, and with a projecting ridge at the mouth; it is suggested that these objects may have been spouts to conduits. Within the nineteenth century cast iron became general in the case of large towns. In London the first iron main was laid by the Chelsea Water Company in 1746. It was a 12-inch main, and cost £2,740.

In a volume of pamphlets in the Guildhall Library, there is a description by Mr. F. W. Reader[1] of two drawings of the neighbourhood of Clerkenwell with the lines of wooden water-mains exposed to view. Both are taken from about the same spot, which is on the course of the Fleet River, at this time—*circa* 1800—an open stream as far as Holborn. The locality is that traversed by the King's Cross Road, formerly the Bagnigge Wells Road. One view shows the mains, four rows lying side by side, crossing the Fleet over

[1] "Wooden Water-pipes at Clerkenwell," F. W. Reader, 1904. (Reprinted from the *Essex Naturalist*, vol. xiii. pp. 272–274.)

WOODEN WATER-PIPES AT CLERKENWELL.

From a reproduction by Mr. F. W. Reader of the drawing in the Soane Museum.

LIBRARIES

an arch in the Spa Fields, and stretching to the New River Head by Sadler's Wells. A street of houses seen in the distance is Exmouth Street, then occupied by well-to-do people. The dome of Spa Fields Chapel, once famous in connection with the Countess of Huntingdon, is seen over the tops of the houses. The Bagnigge Wells Road is seen crossing the picture from left to right in the middle-distance, marked by a line of fence. The second view is from nearly the same point, about where the present Calthorpe Street is, not far from Rowton Mansions, the spectator looking towards King's Cross. The trees of Bagnigge Wells, at this period a flourishing pleasure-garden, and through which wandered the stream of the Fleet, are on the left of the picture. In the foreground the water is seen spurting from defective joints in some of the pipes.

These drawings are said to have been made for Sir John Soane, not on account of their topographical interest, but for the purpose of showing the defective system of the New River mains by the employment of wooden pipes.[1]

Matthews ("Hydraulia," 1835, p. 75) descants on the advantage of leaving the pipes exposed as shown in the drawings, and he comes to the conclusion that upon the whole that method was more economical than covering them up, as this involved at times a great expenditure of time and labour in having to excavate them in order to find a leakage. Instances

[1] Wooden pipes, commonly of 7 inches diameter, cost in 1821 about 8s. a yard. The life of a wooden pipe has been variously estimated at from two to fifteen years, dependant on the soil in which it was laid.

occurred of 200 or 300 yards of a street being taken up and several days elapsing before the workmen could discover a defect.

Interest in the old conduits is revived from time to time by the unearthing of these wooden water-pipes, of which 400 miles are said to have been laid in London; and as it was not worth the expense to take them up when they came to be replaced by metal pipes, there must be many scores of miles of them still underground. The pipes were equally common in the East as well as in the West End of London; some were found while excavations were being carried on in connection with the Whitechapel to Bow Railway extension, opened for traffic in 1902; several hollowed tree-trunks were turned up which were precisely similar in character to those which have at various times been brought to light in Bond Street and its neighbourhood.

In the Guildhall Museum there is a specimen of a wooden water-pipe, 5½ feet in length. The thick end of the tree-trunk has been hollowed out to 9 inches diameter to receive another pipe; the thin end, with a bore of 6 inches, is tapered for insertion into the next length of pipe. In the same Museum is the front of a City conduit, from the corner of South Moulton Street, Oxford Street. The stone face measures 52 × 42½ × 15½ inches; the centre has an orifice in which was fixed the spout, or tap, and the City Arms are carved upon it, with the date 1627 above them. Other examples of the old wooden water-pipes are to be seen in the Museum of the Royal Botanic Society, Regent's Park. Every few years one of the walled-up cisterns is discovered

under the foundations of old houses. A stone used to mark the site of one near the point at which Marylebone Lane crosses Wigmore Street; another was found at the top of North Audley Street in 1875, and the cisterns under the Banqueting House, which once stood on part of the site of Stratford Place, are said yet to exist in dark oblivion.

The use of tree-trunks for water-pipes is still common in the wooded mountain districts of Europe; and in the Western States of America bordering on the Pacific there are miles of pipes made for carrying water to various towns, and also for irrigation and sewer purposes. They vary in diameter from 8 inches to as much as 10 feet, and are made from the famous Californian redwood-tree.

Notwithstanding the numbers of conduits erected at different times in various parts of London, as well as the other modes adopted for supplying water to its inhabitants, the quantity proved inadequate to the demands of a constantly increasing population. In this exigency the invention of Peter Morice,[1] a Dutchman or Fleming, but a free-denizen of London, in the service of Sir Christopher Hatton, marked an important step in advance. Morice's was the first mechanical contrivance is this country for impelling water in an ascending direction, and thus supplying places much higher than the ordinary water-level. Stow calls it "a most artificial forcier": it was, in fact, a plunger or force-pump. The earliest writer to mention Morice and his scheme is Abraham Fleming, one of the continuators of Holinshed's "Chronicles"

[1] The name appears also as Morryce, Moryce, Morris, and Moris.

(*circa* 1587). On the condition of Morice paying 10s. annually, the Mayor, Aldermen and Commonalty granted him a lease, dated May 30, 1581, for a term of five hundred years, by which he was authorised to erect an engine within the first arch of London Bridge. The Thames water, which was conveyed hence in pipes of lead, was at the City's expense brought up to a Standard erected at the north-west corner of Leadenhall, and supplied the eastern part of the City. Two years afterwards, his invention proving of the greatest benefit to the City, the Corporation granted him the use of a second arch for the same term. In the meantime—in 1582—Bernard Randolph, Common Serjeant of the City, agreed to advance money (Stow says the amount was £700) as a charitable gift "towards bringing water out of the Thames, by an engine to be constructed by Peter Morice, from London Bridge to Old Fish Street, in like manner as he had already brought the water to Leadenhall," to supply the private houses of the citizens. This offer had been approved by the Court of Aldermen, and licensed by the Common Council, inasmuch as the work "would profit the whole City, and be no hindrance to the poor water-bearers, who would still have as much work as they were able to perform, so far as the water of the Conduits would satisfy." But before this work of private benevolence was contemplated the Corporation had granted the lease to Morice for his water-wheels at London Bridge.

Some time in 1580 a kind of preliminary agreement for the above-mentioned lease was made by the Mayor and Commonalty with Morice, but for some reason they hesitated to complete it, although they

had paid £50 out of £100 stipulated, and had provided land for the erection of engines. By reason of his employment under Sir Christopher Hatton, Morice was, however, in a position to bring pressure to bear upon the Corporation through his patron, who moved the Lords of the Council to take action in the matter. This they did by addressing a letter [1] to the Mayor requesting "to be certified as to the grounds of the City authorities in refusing to complete the agreement": a somewhat high-handed method of procedure, but which seems to have had the desired effect, though, according to Stow, it was not until 1582 that the new water service came into actual operation.

For a minute account of these London Bridge Waterworks we are indebted to a Mr. Henry Beighton, F.R.S., an engineer, whose description and illustration, with references to the parts of the machine, as it then existed, appeared in the Philosophical Transactions of the Royal Society of London for 1731. The following summary, extracted therefrom, gives the distinguishing features of the machine:—

The pumps, which were ram pumps, similar in principle to those used in the present day, were driven by means of water-wheels actuated by the tide, whether flowing up or down. The plant beneath the arch nearest the City consisted of a water-wheel, having an axle 19 feet long and 3 feet in diameter, carrying 26 floats, each 14 feet long and 18 inches deep, these floats being secured to four felloes carried

[1] "Remembrancia," p. 551. The letter is dated Nonsuch, July 5, 1580.

on eight spokes secured to the axle. The water-wheel axle was journalled in bearings carried upon two levers, one at each end of the wheel, the said levers being fulcrumed at the ends of their shorter arms in the wooden framing; the ends of the long arms of the levers were supported by means of chains which were capable of being raised and lowered manually by means of winch mechanism, the object of this arrangement being to admit of the raising and lowering of the water-wheel in the river. Secured to the ends of the axle of the water-wheel were gear wheels, intermeshing with pinions secured upon 4-throw crank-shafts, one at each end of the wheel. Each of the four crank-pins was connected by means of a connecting-rod to the end of a beam or lever, pivoted at its centre in the framework of the device, so that oscillation of these levers or beams took place upon rotation of the water-wheel. Pivoted to each end of levers or beams were connecting-rods, which directly operated the ram pumps fixed beneath each end of the beams, and as there were four beams at each end of the wheel, each operating two pumps, the single wheel drove sixteen pumps (or forcers, as they were called).

In the third arch of the bridge were fixed three more water-wheels, the first of which worked twelve pumps, eight at one end and four at the other; the second in the middle worked eight pumps, and the third sixteen; making a grand total of fifty-two pumps. These, when working under the best conditions, were designed to pump 123,120 gallons per hour, to a height of 120 feet, though this figure assumed no losses which might be due to leakage

of the valve, pistons, &c. The pumps were connected to a common delivery pipe of 7-inch bore for the supply of the houses. Mr. Beighton considered the apparatus well designed and effective in working, and far superior to a similar apparatus at Marly in France.

Although no description of Morice's original plant, which was destroyed in the Great Fire, seems to have come down to us, it is probable that the one described by Beighton was made after the same model, with perhaps some improvements in the details.

In the Act for rebuilding the City in 1667 it was provided that his grandson, Thomas Morris (*sic*), should have power to rebuild with timber his water-house adjoining London Bridge for supplying the City with water, "as it for almost this hundred years hath done (18 & 19 Charles II. c. 8, s. 39). The property in the Waterworks remained in the possession of Morice's descendants and heirs for many years until, finding the profits diminishing, Thomas and John Morris, surviving representatives of the original grantee, sold their rights in 1703 to Richard Soame (or Soams), citizen and goldsmith, and others, for £38,000. These persons procured from the Corporation the use of another (the fourth) arch of London Bridge; paid £300 fine to the City for the transfer of the lease, and turned the whole property into a company of three hundred shares at £500 each for working and developing the Waterworks. The City conduits still remaining were about this time leased to the proprietors of the Waterworks for £700 a year. When the company was dissolved in 1822 the shares had been increased to 1,500.

On the Surrey side of the Bridge, at Southwark, Thames water was chiefly used, which fell into a large pond in St. Mary Overies, driving a mill called St. Saviour's Mill. At a subsequent period, with the view of erecting additional water-wheels to increase the efficiency of their supply to the City, the proprietors of the London Bridge Works obtained from the Court of Common Council leases of the third and fifth arches; that for the third arch in 1761, and for the fifth arch, on the Southwark side of the Bridge, called from that circumstance "The Borough Wheel," in 1767. There was a stipulation that if the licence should be found to be injurious to the navigation of the river, the City might revoke the grant. The supply of water from the London Bridge Works extended over a large portion of the Borough of Southwark. The drawbacks to the supply from these Works were the commonly turbid state of the water,[1] and nearly the whole of the pipes being of wood, they were unable to sustain the pressure necessary for raising the water into the higher stories of many houses. The wheels also were of wood till 1817, when iron wheels were substituted, which proved more effective, but in seasons when the tides were low the machinery was inefficient, and a steam engine had to be used to pump water from a point near the middle of the river. The Waterworks

[1] The principal method relied upon in the present day for the purification of water-supplies—namely, the slow passage of water through filter-beds—was introduced for the first time on a large scale in 1828, for a portion of the London water-supply, and has not even yet been very generally adopted by some of the principal civilised communities of the world (*Sanitary Engineering*, L. F. Vernon-Harcourt, 1907).

continued in this state until they were assigned to the New River Company by an Act passed July 26, 1822, the third year of George IV., when £15,000 was paid for the unexpired period of the grant. With the building of the new bridge—1825–31—their final demolition was inevitable, those who had obtained their supply from them getting it from the New River and East London Works.

Such is the history in brief of the first private undertaking on record which supplied water for private gain. But besides the London Bridge Works there were other projects brought forward, though few were carried to a successful issue. One of these is noticed by Stow (edition 1633), which was propounded by one Russel "about the year 1580 odd," to bring water from Isleworth, viz., the river of Uxbridge (*i.e.*, the Colne), to supply the north of London; an ambitious scheme on paper, but which seems never to have got beyond that stage. In 1592 a request had been made by Lord Cobham to the Court of Aldermen for a quill of water from the conduit at Ludgate for use in "his house within the Blackfriars"; meanwhile the Lord Mayor wrote suggesting that for the present nothing could be done, but that the City were in treaty with one Frederico Genibella (or Genebelli), an Italian engineer skilled in waterworks, for the erection of a windmill at the fountain-head to increase the supply. If this plan succeeded, the request might be granted. Evidently it did not succeed, for in 1594 we find the request again urged, and supported by a letter from the Lord Burghley.[1] In 1593 Beavis Bulmar,

[1] "Remembrancia," p. 554.

another foreigner, obtained a concession to set up an engine at Broken Wharf, a short distance from Blackfriars Bridge. The works were discontinued on account of the expense being greater in proportion to the supply to be charged for than that of other works. About half a century after this a Sir Edward Ford (in 1641) published "a designe for bringing a navigable river from Rickmansworth, Hertfordshire, to St. Gyles in the Fields." In this tract are set forth the advantages of the proposed river over the existing New River.

CHAPTER IV

THE NEW RIVER—ARTESIAN WELLS

Hugh Myddelton and the New River—Appeals against its construction by landowners and others—Myddelton receives financial assistance from the King—And a loan from the Corporation of London—Opening ceremony on Michaelmas Day, 1613, described by Stow—Monopoly established to oblige consumers to use the New River Company's water—Great value of King's and Adventurers' shares—Transference of the New River Company's business to the Metropolitan Water Board—Artesian wells.

WHILE these and other schemes were being formed and promoted with varying success, and generally with the primary object of meeting local needs, an undertaking, far wider in its scope, and which was destined to outlive all others, came into being. This was the New River, the making of which, for public usefulness, may be classed among the most notable achievements of that age. It was carried through, in the face of much antagonism, by the enterprise and public spirit of a goldsmith of London—but of Welsh extraction—Hugh Myddelton.[1]

[1] The name is spelt in different documents Middleton, Middelton, Mydelton, but he himself usually signed his name Myddelton.

London had far outgrown its existing means of water-supply, but although complaints had been repeatedly made of deficiency, no definite steps were taken in the way of remedy until an Act of Parliament was obtained in the year 1606 (3 Jac. c. 18) authorising the Corporation to bring "a fresh stream of running water to the north parts of London from the springs of Chadwell and Amwell,[1] and other springs in the County of Hertford, not far distant from the same." This water was intended to be brought within the City by a trench not broader than 10 feet throughout its entire length. But even with these powers nothing was done, except that upon "advised consideration" it was thought more convenient that the water should be conveyed through a trunk or vault of brick or stone than in an open trench.

There was a good deal of opposition to the Bill of 1606. A Captain Edmund Colthurst, who appears to have been employed by the Corporation to make plans for a supply of water from the Hertfordshire springs, claimed compensation for having acquired prior rights in this project. In March, 1608, Colthurst offered to carry out the works, but the Court of Aldermen were of opinion that he had not the necessary means, and therefore refused his application. Some recompense was probably made him.

No long time passed before the Corporation, unwilling or lacking the courage to embark upon an

[1] They were fine chalk-water springs in the valley of the Lea, issuing from the foot of the chalk hills. Chadwell was the upper and larger of the two, Amwell lying to the south of Ware.

engineering work of unknown difficulty and expense, abandoned the powers confided to them, and thus a second private undertaking for the supply of London with water became firmly established. By deeds dated in 1609 and 1611 they transferred these powers to Hugh Myddelton, who, as member of Parliament, had sat on Committees for the consideration of the water-supply of North London, which had familiarised him with the subject, declared himself ready to take up the formidable task, and to complete the work within four years. His offer was accepted, and the first sod of the proposed New River was turned on the 21st of April, 1609, the operations commencing at Chadwell, near Ware, the principal spring. At the very outset Myddelton's troubles began. The opposition of the landowners through whose estates the stream had to pass was so determined, that in the year 1610 a Bill was brought into the House of Commons to repeal the New River Acts of 3 and 4 Jac. I.; the petitioners objecting to the new works as destructive of their interests; that "their meadows would be turned into bogs and quagmires," and arable land become "squalid"; that their farms would be "mangled"; that the "cut" was no better than a ditch, dangerous alike to men and cattle.[1] But, despite all obstacles, Myddelton, with untiring energy, persevered in his undertaking, which progressed

[1] The King himself had an unpleasant experience of this. While riding along its banks with Prince Charles in the winter of 1621–22, when the river was slightly frozen over, his horse stumbled and threw him into the water: the King's body disappeared under the ice, nothing but his boots remaining visible. He was quickly dragged out and took no harm from the mishap.

steadily; the City, on his application, granting him an extension of five years, on the ground of difficulties interposed by occupiers and owners of the lands he required for the prosecution of his work.

As might be expected, Myddelton's private purse was unequal to the constant drain upon it, and by the time the channel had been constructed as far as Enfield he found himself in straits for want of money. In this dilemma he applied to the King, with whom he had already had dealings as a jeweller. James, who had become interested in the works and their progress while at Theobalds, his hunting-lodge near Enfield, agreed to furnish one-half the outlay in bringing the New River to North London, and in distributing the water, on condition of receiving one moiety of the undertaking and of its annual profits. The Articles of Agreement between the King and Myddleton, which, however, precluded the former from taking any part in the management, were executed November 5, 1611, and were confirmed by a Grant under the Great Seal on May 2nd of the year following. An abstract of the Grant from the original in the Public Record Office is given by Smiles in his "Lives of the Engineers" (pp. 116–17). In September, 1614, the Corporation granted Myddelton a loan of £3,000 for three years. With this money Myddleton was able to complete the works, and the water was let into the reservoir[1] at the New River

[1] The reservoirs of the New River Company at the New River Head, Clerkenwell, varied in size—one consisted of about 2 acres, but the other three of about 1 acre each, the whole averaging in depth about 10 feet, and each one having a connection with the principal main.

Head, in the parish of Clerkenwell, on Michaelmas Day, 1613, in the presence of Sir John Swinnerton, who was then Lord Mayor, and Thomas Myddelton, brother of Hugh, who was Lord Mayor-elect. Sir Hugh was knighted the same year, and made a baronet in 1622. There was also a great concourse of officials, workmen, and citizens. Stow, who records that he rode down divers times to see the works during their progress, gives a brief description of the opening ceremony, and a metrical speech composed for the occasion—in full.

The shareholders were incorporated by letters patent on the 21st of June, 1619, under the title of the "Governors and Company of the New River brought from Chadwell and Amwell to London." The government of the Corporation was vested in the twenty-nine Adventurers, who held amongst them the thirty-six shares originally belonging to Sir Hugh, who had by that time reduced his holding to only two shares. The New River, as originally constructed, was a canal of 10 feet in width, and probably about 4 feet deep. It followed a very circuitous course, at various levels, of about 38¾ miles (but, as the crow flies, not more than 20 miles), with a slight fall, to Islington, where it discharged its water at the New River Head. The site of this had always been a pond, "an open idell poole," says Howes in his "Annales" (1631), "commonly called the ducking pond." Where the fall of the ground was found to be inconveniently steep a stop-gate (sluice) was introduced across the stream, penning from 3 to 4 feet perpendicularly, the water flowing over weirs down to the next level. In the

opinion of Mr. Robert Mylne, one of the Company's engineers, the river, as originally constructed by Myddelton, obtained quite as large a supply of water from the grass-lands along the hillsides as from the Hertfordshire springs. The bridges over the river were about 160 in number, built mostly of timber, with a water-way under them, not exceeding 10 feet in width. Where roads had to pass under the stream it was carried in wooden troughs lined with lead, supported on arches. One of these troughs, or aqueducts, at Bush Hill, near Edmonton, was about 660 feet long and 5 feet deep. A brick arch also formed part of this aqueduct, under which flowed a stream which had its source in Enfield Chase, the arch sustaining the trough and the road alongside of it. This was considered one of the most important structures of the original New River works, and was said to have cost £500. (Salmon, "History of Hertfordshire," 1728, p. 20.) There were other brick tunnels at Stoke Newington and Islington. The water, when it reached the City, was at first carried in pipes of wood,[1] and it was estimated by the Company's engineer that the waste by leakage from them, and by bursting under pressure, was about one-fourth of the total quantity of water supplied.[2]

[1] In the *Gentleman's Magazine* for March, 1753 (vol. 23, p. 114), is a paper by Sir Christopher Wren, not published in his collected works, called "Thoughts concerning the Distribution of the New River Water," in which he mentions the feeble flow in Soho and the higher parts of London, and suggests improvements; but refers to it as "this noble aqueduct."

[2] Down to 1805 the New River Company could not serve water above the ground floor in any part of London. All their

Long accustomed to receive water without payment, the citizens were naturally in no haste to take the New River supply into their houses. But in those days of monopolies there was little scruple in enforcing compliance; unjust and arbitrary influence from high quarters was unblushingly exercised to check free competition and to oblige consumers to take water from favoured sources. Such influence was plainly shown in more than one instance, as in a proposal for new works at London Bridge for the supply of Southwark—which was prohibited; and also in respect of intended works at Dowgate, certain brewers and others having applied for a lease of a water-house there belonging to the City, and to be allowed to lay pipes to convey any surplus water into their brew-houses without Cripplegate. Although the City Lands Committee recommended that a lease should be granted, yet the Lords of the Council "deemed it expedient to require that stay should be made of any intended waterworks at Dowgate, the more so since the brewers could so conveniently be supplied from the new stream, which was of great consequence to His Majesty's service, and deserved all due encouragement." To such lengths did these prohibitions go when any proceedings were taken which might be supposed to prejudice the New River Company.

The following transaction will convey an idea of

mains being of wood, the water was shut off at night to prevent waste, which was enormous. If a fire broke out it was necessary to send to the New River Head with instructions to turn on the water, and a watchman was kept to look out. (Committee of 1821 on Metropolitan Water Supply. Evidence of Mr. Myne, pp. 6, 8.)

the mode of charging for a supply of water at an early period. In 1616 Hugh Myddelton granted a lease [1] for twenty-one years to a citizen and his wife of a "pipe or quill of half an inch bore, for the service of their yarde and kitchine," by means of "tooe of the smallest swan-necked cockes," in consideration of the yearly sum of 26s. 8d. (Nelson's "History of St. Mary, Islington," 181.)

It was a long time before there were any profits accruing to the shareholders of the New River Company; no dividend was paid until 1633—twenty years from the date of opening. One of the privileges granted by the Charter of Incorporation to the Company was that the Adventurers should hold their property from the Crown in free and common socage, the effect of which was to make each proprietor's share a freehold estate. As the undertaking in its early days yielded no return, Charles I. re-granted his thirty-six shares (half the capital) to Sir Hugh Myddelton, in consideration of an annual payment of £500. This sum is still paid into the Exchequer, and attaches to the King's shares as a "clog" or charge. Mention is made of the Grant, which is dated November 15, 1631, in the Calendar of State Papers, 1631–33. After 1640 the Company's prosperity steadily increased; by the end of the seventeenth century the dividend paid was at the rate of about £200 per share; at the end of the eighteenth century above £500, and by the middle of the nineteenth century about £850. Both King's and Adventurers' shares have been subjected to much

[1] A copy of the lease is in Hughson's "History of London," vol. vi. p. 358 (1806–09).

subdivision. Entick, writing in 1766, estimates the value of a share at that time, from a late sale, at £8,000. At a sale by auction in London, in 1873, one quarter of a King's share was sold for £12,240, nearly £49,000 for the whole share; the income for the last year having been on this quarter share £448. In 1891 a $\frac{1}{120}$th part of a King's share was purchased for £700; and on the 15th of November, 1893, in the open market, an undivided Adventurers' share fetched £94,900.

As regards the first cost of the New River works, the accidental destruction by fire in 1769 of the Company's early records makes it impossible to test the accuracy of the different estimates by comparison with them. Entick, who published his "History and Survey of London" in 1766, in a short notice of the New River, quotes Maitland word for word, merely saying, with reference to the cost: "He (Myddelton) began his work on the 20th February, 1608, and with great difficulty, art, and industry, and a prodigious expense (of, as it is recorded, no less than £500,000)"—although he probably could have got the information at first hand from the Company itself. Maitland (edition of 1760) does not mention the cost. Smiles, in his "Lives of the Engineers" (1861–62), bases his calculation of it upon the repayments out of the Royal Treasury for charges disbursed by Myddelton; entries of these in the Pell records show that the payments made on the King's account were £8,609 14s. 6d., so that, adding the same sum for Myddelton's share, the total expenditure was £17,219 19s. But this evidently does not include other initial outlays,

which run into high figures. A number of items of expenditure are mentioned in a circular dated February 27, 1812, issued by the New River Company to the occupiers of houses supplied with water by them, in which they allege that the formation of their works in the time of the original projector, Hugh Myddelton, cost, "according to the best authorities, £500,000"—a very non-commital statement. In 1821 the Company furnished a Committee of the House of Commons with an estimate of their capital expenditure, which included £369,600 "for original purchase of the springs of Chadwell and Amwell; remuneration to millers upon the river of Lea; purchase of land for formation of river; excavation of ground; levelling and puddling of banks; timber and brick wharfing at various places on banks 80 miles long; embankment of valleys, and tunnelling at five guineas a yard"; £15,700 for 157 brick, timber, and iron bridges; £8,120 for 57 culverts; £6,000 for "the purchase of 60 acres of land for reservoirs, ponds and head cisterns, and their construction, £108,300. The total outlay down to 1820, including £32,000 paid for the York Buildings Waterworks,[1] was £1,115,500."

In more recent times the New River has enlarged its works, widening and otherwise improving the channel; more capacious reservoirs have been constructed, and a great additional supply of water has been obtained from the river Lea, and from numerous wells sunk in the chalk, through the

[1] These works, situate at the bottom of Villiers Street, Strand, getting into financial difficulties, were conveyed to the New River Company in 1818.

London Clay, &c., at Ware, Cheshunt, Hornsey, and elsewhere; but the general course and site of the works are nearly the same as in the time of Myddelton.

The New River Company was for many years the only Company by which water was supplied to London; seven others were subsequently formed, the Chelsea Waterworks being the earliest in 1723 or 1724. With the advent of the water companies one might reasonably expect to find greatly improved conditions of water-supply, if not exactly ideal ones. This, however, was far from being the case. Mr. Jephson tells us in "The Sanitary Evolution of London" (1907)—among other interesting facts and figures—that the supply of water in the eighteen-fifties was not only very limited in quantity, but, with the exception of that supplied by one company, bad in quality. Moreover, the right of supplying this vital requirement, or, as it has been called, this "life-blood of cities," had been made over by Parliament to sundry private companies without taking any guarantee or security for a proper distribution to the people, or for the purity of the water, or the sufficiency of its supply. Although by the middle of the nineteenth century there was no portion of the metropolis into which the mains and pipes of some of the companies had not been carried, yet, as the companies were under no compulsion to supply it to all houses, large numbers, and particularly the poorer classes, received no supply. In the district supplied by the New River Company, containing about 900,000 persons, about one-third of the population were unsupplied; and in

the much smaller area of the Southwark Company's district about 30,000 persons had no supply. Even in 1850 it was computed that 80,000 houses in London, inhabited by 640,000 persons, were unsupplied with water. A very large proportion of the people could only obtain water from stand-pipes erected in the courts or streets, and that only at intermittent periods and for a very short time in the day.

The great shortage of company-supplied water compelled large numbers to have recourse to the pumps which still existed in considerable numbers in many parts of London, the water from which was drawn from shallow wells.

In June, 1904, the undertakings of seven out of the eight companies passed to the Metropolitan Water Board (constituted 1902), which took over their debts, liabilities, &c., and a month later the business of the New River Company passed to the same authority, which now control the whole water-supply of London. The cost to the ratepayers of London of this huge transfer was not much less than £40,000,000.

Artesian Wells.

Many advantages were expected to have accrued to Londoners from the absorption of the old water companies, but these advantages, so confidently anticipated when the amalgamation was first mooted, have not been realised. On the contrary, the Water Board's charges under the new Metropolitan Water

Board Charges Act (1907) are found to press very heavily upon large establishments, especially in the City proper, for there the rateable value on which the assessment is made is extremely high. In consequence of this the owners and occupiers of highly rated property, who are large users of water—in order to effect economy—now obtain their supplies by means of artesian wells.[1]

As these wells have their origin below that zone which is affected by the changing superficial temperature of the seasons, the water is of an even temperature and, when drawn from deep-seated springs, of great purity and abundance; it is therefore hardly a matter for wonder to find that most large buildings now being erected in the metropolis are provided with their own artesian wells.

The principle on which artesian wells are made may be thus briefly stated. Let us suppose a geographical basin of greater or less extent, in which two impermeable layers (as of clay) enclose between them a permeable layer (as of gravel, sand, or limestone). The rain-water falling on that part of this porous layer which comes to the surface, and which is called the outcrop, will filter through it, and following the natural fall of the ground will collect in the hollow of the basin, whence it cannot escape owing to the impermeable strata above and below it. If, now, a vertical hole be sunk down to the water-bearing

[1] One of the first artesian wells near London was bored in 1794, at Norland House, the site of which is now occupied by Norland Square, on the north-west of Holland House, Kensington ("Cyclopædia of Useful Arts and Manufactures," Div. I., footnote, p. 79).

stratum, the water striving to regain its level will spout out to a height which depends on the difference between the levels of the outcrop and of the point at which the boring is made.[1] The conformation of the London Basin under and around the City seems to fulfil all these conditions.

In an article headed "London Wells" in the *Daily Telegraph* of September 14, 1909, there is a table, by no means complete, but which gives the depth, and gallons yielded per hour, of some dozen of the principal artesian wells installed in London. The depth of these range from 300 to 500 feet, and the yield per hour is from 3,000 to 13,000 gallons. Still larger quantities, and from greater depths, are obtained from wells in France. The most famous artesian well is perhaps that of Grenelle, formerly a village, now forming a south-west quarter of Paris, which it supplies with water. The water is brought up from the gault at a depth of nearly 1,800 feet. It yields over 30,000 gallons an hour, the water rising with such force as to be propelled 32 feet above the surface. One at Tours jets 6 feet above-ground, and, rushing up with great energy, yields 237 gallons per minute (14,220 gallons per hour).

But these are all outdone by some remarkably deep artesian wells which have been struck in various parts of Australia, especially in what is termed the main artesian area of that continent, which is of immense extent, forming an irregular triangle, and covering a large part of Queensland, New South Wales, and South Australia. It is the

[1] Ganot's "Physics," 13th edition, 1890, pp. 99, 100.

largest artesian basin known in the world, except that of Dakota, in America. Some of the bores are of great depth: the Dolgelly bore, New South Wales, is 4,086 feet deep; the outputs are even more extraordinary; one near Richmond, North Queensland, with a depth of 841 feet, has an output of 1,500,000 gallons per day (or over 60,000 per hour); another bore in the same province yields 800,000 gallons per day. The deepest bore is at Bimerah in Queensland: it goes down 5,045 feet, or nearly a mile. The well which gives the greatest flow is that at Charleville, in the same state, which averages over 3,000,000 gallons per day.

The cost of sinking artesian wells in London does not seem to be at all prohibitive, and when the ultimate saving is taken into consideration the capital expenditure usually proves to have been well laid out. At several places where wells have been sunk the cost is said not to exceed 3d. per 1,000 gallons, and even when compared with the old charge of the now defunct water companies, which was about 8d. per 1,000 gallons, this method of obtaining water is sufficiently economical to warrant the sinking of artesian wells.

A leading firm of well-engineers in Southwark, who are responsible for many of the wells lately sunk, have stated that about twenty wells have recently been bored in the City and thirteen in the West End, while over one hundred have been put down in the metropolitan area. Most of this work has been done for large business establishments, such as banks, breweries, public baths, co-operative stores, hotels, and railway companies.

APPENDIX

APPENDIX

SHALLOW OR SURFACE WELLS AND PUMPS OF LONDON.

AMONG the Returns made by the parochial authorities to the Board of Trade in 1872, with reference to the supply of water in the metropolis, is one giving the name, position, and depth, where known, of every public surface well within the metropolis, specifying which of them had been permanently closed at that date. The list, which fills several pages, is too long to transcribe at length, but the notes here following include some of the principal public wells and pumps named in the Return, besides a few others which, for some unexplained reason, are omitted from it.

Beginning with the East End. In the parish of St. George's-in-the-East, there were two public pumps, open in 1872, the date of the Return, viz., one in Wellclose Square, within the enclosure, and not accessible to the public, the other within the churchyard gates, of which the public were allowed the free use.

In the district of Whitechapel four public wells were known to exist, all of which, when the Return was made, were on the point of being filled up.

Many more in this part of London are scheduled, but they need not be specified here. Passing on then towards the City, one may read in Strype that "besides those waters brought into the City from abroad; it affords abundance of excellent springs everywhere within itself, the waters whereof are much commended: particularly the pump at St. Martin's Outwich Church; the pump near St. Antholin's Church (Watling Street): the pump in St. Paul's Churchyard, the pump in Christ's

Hospital: at all which places, and others, are iron dishes hanging, for the use of strangers to drink in." [1]

While excavations were being made in Shoreditch in connection with the electric lighting installation (about the year 1897), an old well was disclosed, which, on measurements being taken, was found to be 20 feet deep and a yard in diameter, and to contain 7 feet of water. There were found in the well the elm-wood barrel and suction-pipe of a pump. Although unmistakably of ancient date, the brickwork was remarkably clean and perfect; compact and mortared towards the top, but loose towards the bottom to allow the water to percolate into the well. The well was under the pathway in the High Street, two or three yards from the entrance to the Standard Theatre, close to the end of Holywell Lane, and in the district known as the Holywell Liberty. Unfortunately the well was filled in only three hours after its discovery, in order not to delay the work in hand; so that no further investigations could be made.[2]

In the Liberty of Norton Folgate, in the High Street opposite No. 32, there was formerly a well which had been under the control of the Board of Works for the Whitechapel District since 1855, but was closed by that Board about 1869 or 1870.

Facing Aldgate [3] High Street, at the point where Leadenhall Street and Fenchurch Street meet, is Aldgate Pump. This old pump is a well-known landmark of the City, and must have been a very familiar object to the antiquary, John Stow, who for nearly thirty years was a working tailor in the neighbourhood of

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[1] Strype's "Stow," 1720, Bk. i. p. 27.

[2] Extract from a newspaper cutting—undated—from Pennant's "London," 1805, vol. iii., in the Guildhall Library.

[3] Aldgate is commonly supposed to be identical with Old Gate, but Mr. Loftie states that in a document in St. Paul's Cathedral, which must have been written before 1115, the name is spelt Alegate (Alegate=Allgate, *i.e.*, gate for all, free of toll). The *d* was inserted from a mistaken notion, first by Stow, and after him by Dr. Stukeley, and the word was written Ealdgate, which is equivalent to Oldgate, not Aldgate.

Leaden Hall and Fenchurch Street: he alludes to it when he is describing Aldgate Ward, the principal street of which, he says, "beginneth at Ald Gate, stretching west to sometime a fayre well, where now a pumpe is placed."

Aldgate Pump, more than any other, seems to have kept a firm hold upon the popular sentiment; the origin of this may probably be traced back to the fifteenth century, when St. Michael's Well (so called from the neighbouring chapel of that name) occupied nearly the same spot. It is most likely that medicinal or holy virtues were claimed for the waters of St. Michael's Well. A pump was erected over the well probably about the latter part of the sixteenth century, when a row of houses on each side had formed a street. Previous to this, Fenchurch Street extended no further eastward than the graveyard of St. Katherine Coleman, nor did Leadenhall Street extend further than Cree Lane. The space between the terminations of the two streets was occupied by mansions, with their courtyards and gardens. Some forty years ago (*i.e.*, in the eighteen hundred and sixties) the pump was moved several feet further west, when the frontage of the property at the corner was set back to broaden the thoroughfare. The well of Aldgate was sunk in a spit of the gravel-bed extending northwards to Winchmore Hill.[1] Owing partly to the imaginary medicinal qualities of the water, and perhaps still more to its long-continued use, the inhabitants resented, or at least obstructed, any proposals which were made for the removal of the pump. The continuance of its use by the public was, however, shown by chemical analysis to be attended with such grave risk to the public health that the well was in 1876 filled in, and a cistern below the ground connected with the New River supply substituted. Thus, although the well is abolished, Aldgate Pump still exists. It is now enclosed in a stone casing of four sides, ornamented by bands of rustic work, and having a little gable roof: the spout is of bronze in the shape of a dog's head.[2]

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[1] "Antiquities of the Ward of Aldgate," by S. T. Robinson and C. Humphreys, 1871; and "Some Notes on the Ward of Aldgate," by R. Kemp, 1904.

[2] The previous structure, designed by Sir William Tite, had to make way, in 1870 or 1871, for the one described above. (The *Builder* June 29, 1872.)

Appendix

Some of the older maps and plans mark the well of St. Michael: the little pent-house which covered it is shown very distinctly in Agas's map. Views of the pump which succeeded it are not rare, but are of recent date. The Crace Collection contains a water-colour drawing of it by T. H. Shepherd—undated, but before 1853.[1]

Besides the above, there were three other pumps in the Ward of Aldgate; one at the corner of the Minories, opposite St. Botolph's Church. This one does not come into the 1872 Return, but some time before its publication the dismantling of the pump had begun by the removal of the handle and the breaking of the nozzle. In spite of repeated and costly attempts, no sample of the water from the surface well in connection with it was obtained.

In the churchyard of St. Katherine Coleman, which is situated a little to the south of Fenchurch Street and east of Mark Lane, was a well of unknown depth, but believed to be very deep, and in all probability of ancient date, the site of the present church having been occupied by one of fifteenth-century age.

Another well in Aldgate Ward, under 30 feet in depth, with a pump over it, stood opposite Church Row, Fenchurch Street, directly in front of the "East India Arms" public-house, and was open at the date of the Return. There used to be a mark on the kerbstone, showing where the pump stood. The immediate cause of its removal was owing to the main drain deep sewer having completely exhausted its supply. The pump is marked on the Ordnance Survey map of 1873–75.

There was a well in Crutched Friars as far back as the sixteenth century. The Rev. Dr. Povah, in his "Annals of the Parish of St. Olave, Hart Street" (1904) gives an extract from the Burial Register, which bears this out. The entry runs thus :—

"1564, Aug. 9. Maister Gallierd dwelling over against the well not far from the Crochet Friars."

The well here referred to was in the middle of the highway

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[1] "A draft (draught) on Aldgate Pump" was a mercantile phrase for a bad note (Fielding's Works), "Essay on the Character of Men," vol. viii. p. 172.

at the south or lower end of Jewry Street, which is a continuation of Crutched Friars[1] to Aldgate.

Stow notices the same well or pump, when he describes the boundaries of the parish of St. Olave: "So returning againe, they goe up towards Aldgate on the east side, so far as directly against the signe of the Cocke, returning back on the west side, to the pumpe in Crochet Friars, and then to the place where they began."[2]

The modern pump is shown on the Ordnance Survey map of 1873–75, on the west side of Crutched Friars, nearly opposite George Street.

On the north side of the Tower glacis garden there was a well, 27 feet deep, with an iron pump over it, which, the Return states: "though now out of order, will shortly be repaired." This was of great use for the garden, and having a spout into Postern Row, was also a great convenience to the inhabitants in the vicinity.

Replying to a recent inquiry made by the writer as to when the well was closed, &c., the Secretary of the Office of Works states, in a letter dated October 27, 1909: "The Board have no definite information as to the antiquity of the well. The pump was put up by Phillips and Hopwood in 1801 (as inscribed on it); but it is not known when its use was discontinued."[3] It now (1909) stands at the top of the bank within the garden railings, in or near its original position. Drinking water is supplied from a small drinking-fountain in the gardens just below, and this is drawn from the mains.

An engraving of the Mint in Hughson's "London" (1806–09, vol. ii.) brings in part of the Tower glacis overlooking the moat, and on the left of the picture is the pump. It is also marked on the Ordnance Survey map of 1873–75.

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[1] Crutched Friars—so called after the building of the Great Monastery of the brethren of the holy cross; Crouched or Crossed Friars, distinguished by the cross upon their dress. The street in the fourteenth century was known as Hart Street.

[2] Stow's "Survey," Strype's, 1720, vol. i. Bk. 2, p. 41.

[3] The removal of the houses known as Postern Row, between 1883 and 1887, was probably about the time that this pump ceased to be used.

Appendix

The following description annexed to the Return applies to a well, 23 feet deep (open in 1872), in front of the doorway of St. Dunstan's Chambers, at the corner of St. Dunstan's Alley, in Idol Lane, near the Church of St. Dunstan's-in-the-East: "The soil is gravel, and at the bottom is placed chalk to the depth of one foot, which is occasionally taken out and cleaned. The water is considered so good that the fishermen from Billingsgate are in the habit of filling their casks with it to take to sea; besides being much used in the neighbourhood."

About the year 1873 there was a discussion in the vestry as to sinking an artesian well for the supply of water in place of the pump; but it was found to be too costly, and the scheme was never carried out.[1] Subsequently the well was closed and the pump was moved to where it now stands in the churchyard of St. Dunstan, against the south wall of the church. It is cast in the shape of a fluted column and has the date 1818 inscribed on it.

In Leadenhall Hides Market there was a well about 30 feet deep. It is thus referred to in the Return: "This well some years ago lost water owing, as is supposed, to the deepening of the sewers and the extensive excavations for the large buildings in the vicinity." A pump is marked on the Ordnance Survey map (1873–75) in the position mentioned above.

In the Leaden Hall[2] proper was another well of the same depth as the last. "This well was sunk in the fifteenth century within the Hall, and subsequently a pump was put up in Half Moon Passage, but the water has in like manner gone, and the well is now out of use."

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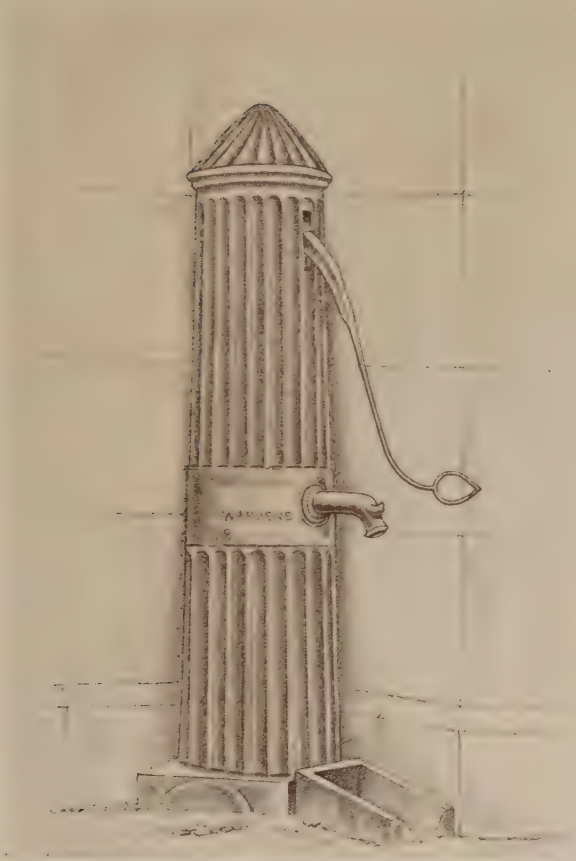
[1] This information was obtained through the kindness of Mr. J. E. Shearman, M.A., Vestry Clerk of St. Dunstan's.

[2] Stow says of Leaden Hall: "I read that in the year 1309 it belonged to Sir Hugh Nevill, Knight." The researches of Mr. Riley show that the Hall belonged to the City as early as 1320. It was converted into a granary, and probably a market, by Sir Simon Eyre (or, in mediæval rolls, Symken Eyer), a draper, and Lord Mayor of London in 1445. The portion of the market in question, viz., the Leadenhall Street end, was rebuilt in 1881.



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PUMP IN CHURCHYARD OF ST. DUNSTAN-IN-THE-EAST.

From an original sketch by the author (1909).

To face p. 330.

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Appendix

The setting up of a pump in Lime Street Ward is thus recounted by Stow: "In the year 1576, partly at the charges of the parish of St. Andrew (Undershaft), and partly at the charges of the Chamber of London, a water pumpe was raised in the high streete of Limestreete Warde (*i.e.*, Leadenhall Street), near unto Limestreete Corner: for the placing of which pumpe . . . they were forced to dig more than two fadome. . . . Having set up the pumpe, with oft-repairing and great charges to the Parish (it) continued not four and twenty yeares, but being rotted, was taken up, and a new set in place, in the yeare 1600."[1]

By the Church of St. Martin Outwich, formerly standing at the east corner of Threadneedle Street, facing Bishopsgate Street, there was an old well, of unknown depth, which was permanently closed about the year 1862. Its position is said by Stow to have been over against the east end of the church, and that it had two buckets so fastened that the drawing up of the one let down the other; "but now of late turned into a pumpe." The church was pulled down in 1874, and the site is now occupied by the head office of the Capital and Counties Bank.

In Allen's "History of London" (1827–29) there is an engraving of the pump in the position described by Stow; it is a plain square structure, with a lamp on the top; the date is 1794. Godwin and Britton's work on the "Churches of London" (1839) shows that this had been replaced by one of rather uncommon shape, which might have been copied from a classic model.

In Bishopsgate Street Without there was also a pump, which stood on the edge of the pavement in front of the Church of St. Botolph. At the Bishopsgate Institute and Free Library there is a large, well executed engraving of the church, drawn and etched by A. P. Moore, and aquatinted by G. Hawkins, the date of publication being 1802. In this picture, the pump, being in deep shadow, cannot be made out very clearly. In another smaller and less pretentious print it is seen to be of the ordinary square shape, panelled on the sides, and with a drinking trough.

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[1] Stow's "Survey," text of 1603. Ed. by C. L. Kingsford, 1908, vol. i. p. 160.

No mention is made of this pump in the 1872 Return, but it is marked on the Ordnance Survey maps of 1873–75.

It was in existence in 1878, as reference is made to it in a communication received by the Commissioners of Sewers, reported at their meeting of January 22nd in that year, from the Metropolitan Drinking Fountain and Cattle Trough Association, who proposed to remove the iron troughs from the pumps in Cornhill and Bishopsgate Street, and to provide granite troughs with self-acting apparatus for the supply of water, &c. (the *City Press*). It is probable that the well supplying the pump had been filled in before this time, in accordance with the recommendation of the Commissioners of Sewers addressed to all the ward and parochial authorities in 1875.

A stand-pipe now indicates the spot where the pump formerly stood.

On the west side of Gracechurch Street, in Bell Yard, there was a well, with a depth of about 30 feet. The pump over it stood in front of the Bell Tavern—an old house, having the date 1827 on a bell which is built into the wall of the house between the upper windows. The remarks in the Return are these: "The water from this well has recently (*i.e.*, before 1872), been withdrawn from it because of some interference with the sewer in Gracechurch Street. The Ordnance Survey map of 1873–75 indicates the spot where the pump stood.

A well was open in 1872 under the roadway of Cornhill, nearly midway between No. 24 and 27, about 30 feet in depth. "The well," the Return states, "in April, 1871, had about 14 feet of water in it, but later, *i.e.*, in August and September of the same year, there were only about 3 feet of water in it, at which depth the water would not rise into the pipe."

At the south-east corner of the Royal Exchange, standing on the edge of the kerb, with a granite drinking trough[1] in front of it, is Cornhill pump. It will repay a few moments'

[1] These were formerly of iron, but about thirty years ago they were, in some cases, removed, and granite troughs with self-acting apparatus provided.

inspection. The case is an ornamental obelisk of iron, having at the bottom, but now hidden by the trough, the name "Nathaniel Wright, Architect"; the founders being Messrs. Phillips and Hopwood—makers, it will be remembered, of the pump in the Tower gardens. The decorations consist of emblematical figures in relief, three of which are the badges of old-established Fire Offices, representing respectively the "Sun," the "Phœnix," and the "London Assurance." The fourth represents the second Royal Exchange. The side which faces the roadway bears the following very interesting inscription: "On this spot a well was made, and a House of Correction[1] built thereon by Henry Wallis,[2] Mayor of London, in the year 1282." Further details are given on the side facing the pavement: "The well was discovered, and enlarged, and this pump erected in the year 1799, by the contributions of the Bank of England, the East India Company, the neighbouring Fire Offices, together with the Bankers and Traders of the Ward of Cornhill." The well had been laid open by a sinking of the pavement in front of the Royal Exchange, March 16, 1799.

A correspondent of the *City Press*, of August, 21, 1875, writes: "I remember the time when the Cornhill Pump was besieged by quite a little crowd of persons with cans, bottles, &c., to get some pure spring water." It may be doubted if this definition was not too flattering, for even then the purity of some of the shallow-well waters of London had been called in question.

The well and pump have been disused for some years past; the water which fills the trough, so much enjoyed by the thirsty horses of passing vehicles, being derived from the New River Company's mains. The iron case of the pump remains, but deprived of handle and spout. The whole structure would be much the better for a coat of paint, which would not only improve its appearance, but would also tend to arrest decay.

The pump is figured in Mr. Charles Welch's "Modern History of the City of London" (1896): the reproduction apparently

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[1] From its fancied resemblance to a large cask standing on end, this building was nicknamed the Tonne (Tun).

[2] In old documents the spelling is very varied—"le Galeys," "le Waleys," and "le Walies"; showing the influence of the Norman-French language on surnames.

copied from a print in the Crace Collection (No. 1972), Rawle del. et sculp., 1800. There is also a photograph of it, as it appears to-day, in an entertaining little book of "Old London Memorials," by Mr. W. J. Roberts (1909).

The handsome drinking fountain in the open space at the east end of the Royal Exchange, in front of the Peabody statue, was erected in 1878 by the authorities of Broad Street Ward to supply the place of the pump in Bartholomew Lane, the use of which was interdicted by the Commissioners of Sewers, on the recommendation of the Medical Officer of Health, in his report of 1875. The Bartholomew Lane site being too circumscribed, the Commissioners sanctioned the erection of the fountain at the northern end of Royal Exchange Avenue. The main portion of the fountain is of Penryn granite, and has four basins; the canopy over the white marble group (sculptured by Mr. Dalon, of Chelsea), is of bronze. Mr. J. S. Edmeston was the architect, and the Drinking Fountain Association supplied the hydraulic work.

A full-page engraving of this fountain occurs in the *Builder* of April 6, 1878.

The pump in Bartholomew Lane was at one time much used by the people of the neighbourhood, who trusted implicitly in its water, as appears from a letter to the *City Press* of October 23, 1875, which was only a short time before its removal. During the later years of its existence it was also used by the cabmen to water their horses. From its position in a side street, away from the main thoroughfare, it was never so important as those more centrally placed. Where the pump stood is a square pillar letter-box, and in front of it a stand-pipe for the use of the few horse-cabs on the rank; placed there in 1877, at the request of occupiers of premises in Bartholomew Lane and neighbourhood, in substitution of the water from the pump.

The position of the "Guildhall" or "Corporation" pump was in Guildhall Buildings, between the Court of King's Bench (now the Lord Mayor's Court) and the Bankruptcy Court, which has been superseded by a large block of offices, built in 1890. The depth of the well was about 50 feet. It was not permanently closed in 1872, but the handle of the pump had been taken away, rendering it, of course, unusable. Not being among those reported upon by the Medical Officer in 1875, it had probably been already removed.

Appendix

The Parish Pump of St. Michael Bassishaw [1] stood on the footway opposite No. 18, Basinghall Street, by the Guildhall Library. It was placed there under a bequest of one John Bankes, who, in 1630, made an endowment of 13s. 4d. a year for keeping the pump in repair. The well beneath it was about 30 feet in depth. The pump was open in 1872, and was at that time enclosed in the hoardings around the buildings of the City Library, which was opened on November 5th of the same year. The pump was finally removed in 1876 by the parish authorities of St. Michael Bassishaw, at the request of the late Commissioners of Sewers, "as an obstruction and hindrance to the public going." [2]

Against the Church of St. Olave, Jewry, which was situated on the west side of the Old Jewry, was a pump over a well of unknown depth. This had been closed before the Return was made. The old church (destroyed in the Great Fire) was named St. Olave, Upwell, from the presence of a well under the east end of the church, which was pulled down in 1888. The tower has been preserved and is used as the rectory house to St. Margaret, Lothbury.

In Russia Row, Honey Lane Market, within the railings that enclosed the City of London School on the north side, was a well with a pump over it, which is understood to have been closed some years before 1872. Depth not known. The school, it may be noted, was removed to a site on the Victoria Embankment in 1882; the new school was opened in 1883, and the freehold building of the old school was sold privately in the same year. The site is occupied by Milk Street Buildings. The writer was recently informed by the secretary of the school that no record had been kept of the year in which the well was closed.

The pump is marked on the Ordnance Survey map of 1873–75.

In the churchyard of St. Mary-le-Bow, Cheapside, within the railings on the west side of the church, and having a pump over

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[1] The town residence of the Basing family, known as Basing's-haw, or hall, gave its name to the street. Solomon Basing was Mayor of London in 1216. The Bankruptcy Court was built in 1820 on the site of the old mansion.

[2] These details were kindly furnished by Mr. P. W. Bicknell, of the Public Health Department, Guildhall.

it, was a well about 32 feet deep. The site is occupied by a pillar letter-box. There is no other well known of in this parish.

In the vestry is a model of the church, designed and executed in wood, about seventy years ago, by John Watts, who was sexton of the church from 1835 to 1859. It was presented to the church by his son. The pump is shown in the model in the place it occupied close to the wall of the church. It also appears in a water-colour drawing of Bow Church, by G. Shepherd, 1812 (Crace Cat., No. 1850), which is reproduced in a history of the fabric by the Rev. A. W. Hutton, M.A., the present rector.

After the pump had been condemned by the sanitary authorities, a drinking fountain was erected by Messrs. Copestake, Moore, Crampton and Co., of Bow Churchyard, on November 4, 1859, at the south-east corner of the church, next to Bow Lane.

Describing the boundaries of Cripplegate Ward, Stow says, the ward "runneth west to a pumpe where of old there was a fayre well with two buckets, at the south corner of Alderman burie Streete." The well is shown on Agas's map, at the meeting of the Old Jewry (which at that time was of greater extent), Milk Street, Lad Lane, and Aldermanbury.

Strype defines Little Britain (which, according to Stow, took that name "of the Dukes of Brittany lodging there"), as coming out of Aldersgate Street by St. Botolph's Church and running west to a pump, where it opens into a broad street, and then as turning northwards to Duck Lane (Duke Street), where it has a passage to St. Bartholomew's Hospital. In the latter part of the seventeenth, and early part of the eighteenth century, Little Britain was much inhabited by booksellers, especially from the pump to Duck Lane, and at that time was a great emporium of learned authors. The shop of Edward Ballard (one of the last surviving booksellers of the eighteenth-century school), bearing the sign of the "Globe," stood over against the pump. Later still Washington Irving, wandering contemplatively in Little Britain, gives an admirable picture of that ancient mart of bibliopolists in his "Sketch Book."

There seem to be no later references to this pump, though it would appear that one existed here down to the nineteenth century, but which has disappeared long since. No pump is marked hereabouts on the maps of the Ordnance Survey.

Appendix

On the east side of Aldersgate Street was Fann's Alley, just without the Bars ;[1] the entrance, says Maitland (1739), "broad enough for carts, and but indifferently built and inhabited." The Alley thus referred to was in due time widened and improved by rebuilding, and became Fann Street. A peculiarity about this street is that its south side is in the City, while its north side is in the Borough of Finsbury ; the line of demarcation passing down the middle of the street.

After much inquiry and record searching, the writer has been unsuccessful in fixing the exact position of the pump here, but if the memory of an old inhabitant of the district can be trusted, it stood at the Aldersgate Street end of Fann Street. This pump was one of the four reported upon by Dr. Saunders in 1875, which led to its being ultimately condemned and removed. For some time before this, however, the water was considered dangerous, and there was considerable difficulty in preventing children and others from pumping and drinking the water. As if to compensate the inhabitants for the loss of their pump, Mr. Alderman Besley, the Alderman of the Ward of Aldersgate, who died December 17, 1876, provided in his will for the setting up of two drinking fountains ; these, in the words of the testator, were "to be erected and placed flat against the two City boundary posts—at a cost not exceeding six hundred pounds." These two fountains are identical in design, and consist of obelisks built of grey granite and other coloured stones, each having a lamp on the top, and two basins. An inscription on them records the gift.

In the parish of St. John, Clerkenwell, a well in Ray Street, with a pump near it, and connected with it, was open in 1856 and closed in 1857. It was 15 feet deep, and was called "Clerks' Well," being in fact one of the three wells mentioned by FitzStephen in his description of London in the twelfth century.

In the Holborn district there were, besides others of less note, the following wells, all provided with pumps for raising the

[1] "A pair of postes," as Stow calls them, which marked the City boundary in that direction. The name of Aldersgate Bars, by which they were known, long continued in use, and is marked on old plans of the Ward, but it is now obsolete.

water, viz. : In the centre of the crossing between Gloucester Street and Devonshire Street, a well 23 feet deep. In Gray's Inn Road, at the corner of Queen's Head Court, was another, 25 feet in depth ; and in Red Lion Square at the eastern end of the garden, which occupies the centre, was a well 20 feet deep. These are all marked on the Ordnance Survey Map of 1873–75.

The parish of St. Clement Danes contained three public wells : One at New Inn (which adjoins Clement's Inn)—depth, 25 feet ; another in front of Clement's Inn Hall—depth unknown ; the remarks upon this well in the Return are that there had been no water in it for eight years (*i.e.*, since 1864). This was the far-famed "holy" well of St. Clement. A third was in the north-east corner of the churchyard of St. Clement Danes—of unknown depth, which, at the date of the Return (1872), had been closed for nearly twenty years, or about 1853 or 1854. It is marked on the Ordnance Survey maps of 1873–5.

Within the Liberty of the Rolls, there was formerly a well in Chancery Lane, between the houses numbered 89 and 90 respectively ; it was about 18 feet deep. The escape of gas from the mains having affected the water, the then Paving Board of the Rolls Liberty, about the year 1847, closed the well and had it filled up. At the same time they caused another well to be sunk in Breams Buildings, erecting a pump. This was open in 1872, and in use by the public, and was about 18 feet deep. It is shown on the Ordnance Survey map of 1873–75 on the north side of Breams Buildings, near St. Thomas's Church.

In the precinct of the Savoy, on the east side of Savoy Street, at the back of No. 7, Lancaster Place, a well existed which was closed about the year 1869, on account of a threatened visitation of cholera. The pump is still (1909) *in situ* and bears this inscription upon it : "Repaired by the Commissioners for Paving Savoy Precinct, 1842. John Cochran, Chapel Warden." The pump is of cast iron, painted red, octagonal in shape, and the sides panelled by way of ornament.

In parishes of St. Anne and St. James, Westminster, were several wells all permanently closed when the return was issued :

one in the former parish, opposite to the parish church in Dean Street, very deep, was closed about 1856.

The pump in Great Dean's Yard, about 1870, was an unpretending iron structure, without ornamental details of any kind; but happily for those who lived near it, and for St. Peter's College (better known as Westminster School), it was always ready with its best of spring water. But between the years 1870 and 1872 it ran dry.

South of the Thames. There was a well on the north side of St. Thomas's Street, in front of St. Thomas's (old) Hospital.

In Bermondsey. When the Return was made there were no wells in this parish open to the public and used for drinking. The only public wells in the parish, as far as could be ascertained, were at Valentine Place, Long Lane, Marigold Court, Star Corner, but these had all been closed many years.

In the parish of St. George the Martyr, there were about thirteen wells, but these were closed by the Vestry since the passing of the Metropolis Management Act of 1855.

In a report by Dr. W. Sedgwick Saunders (Medical Officer of Health) on some chemical analyses, which he had made, of the waters from the surface wells and pumps remaining in the City of London, and presented to the Commissioners of Sewers in 1875, he states that there were at that time only four pumps to which the public had free access in the City of London, namely, at Aldgate, Bartholomew Lane, Crutched Friars, and Fann Street. These were all that remained of the thirty-five public pumps which were in use in the City in 1866 (the year of cholera), some having been condemned by Dr. Saunders's predecessor, and closed by the local authorities, whilst others had become dry by the construction of the deep sewers and subways, which utterly exhausted the sources of the supplies to the surface wells in connection with them.

Some years later, in 1886, in the course of a discussion in the Commission of Sewers, on the water supply of the City, Dr. Saunders said that for the last twelve years no well had been closed of a greater depth than 30 feet. These wells had been practically closed by basements and the Underground Railway.

Only a few words need be said here in reference to the results of the chemical examination to which Dr. Saunders submitted the water from the City pumps. A glance at the

table drawn up by him shows that the specimens taken from the four pumps above mentioned are polluted with albuminoid ammonia (most probably of organic origin), in poisonous quantities.

The whole of Dr. Saunders's table of analyses is not given, but the extract below will be sufficient to show the marked contrast between the samples of good and bad waters. He explains that the variations noticed in the different samples of the same water depend upon the time passed between the drawing of the water from the well and its analysis, upon the state of the rainfall, and upon other circumstances.

Analyses of Waters from the City Pumps, from Samples Operated Upon by Dr. Saunders in His Laboratory at Various Periods, and in Different Weathers, During the Year 1875 :—

	Grains per Gallon.		Parts per Million.	
	Solids.	Chlorine.	Free Ammonia.	Albuminoid Ammonia.
Good.				
New River Company ...	17·7	1·1	0·00	0·06
Thames	18·5	1·2	0·01	0·06
Bad.				
Aldgate Pump	103	10·5	0·72	0·12
Aldgate Pump	108	9·4	0·48	0·08
Aldgate Pump	not taken	10·5	0·25	0·26
Bartholomew Lane ...	42	4·3	1·80	0·08
Bartholomew Lane ...	50	4·1	1·40	0·08
Crutched Friars ...	73	4·3	0·04	0·10
Fann Street	142	9·9	2·20	0·22

Dr. W. Collingridge, the Medical Officer of Health for the City, kindly communicated to the writer the following notes, which describe how the last of the pumps were finally dealt with.

As the result of Dr. Saunders's report in 1875 the late Commissioners of Sewers passed the following resolution on November 2nd of that year :—

"That a copy of the Medical Officer's report of the 19th of October in relation to Pumps be sent to the Deputy of each Ward

and to the Churchwardens of the Parishes in the City where such Pumps are situated, with a letter pointing their attention to the expediency of having the said Pumps closed, and warning them of the danger that may arise from the water being used for drinking purposes and that the Committee be authorised to investigate the condition of the Wells with the sanction of the proper authorities."

This resulted in the closing of the wells mentioned in the report, viz., Fann Street, Bartholomew Lane, Crutched Friars, and Aldgate.

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